

New MacBook Pro and MacBook Air: our verdict **p60**



Photos for OS X: how to use Apple's newest app **p44**

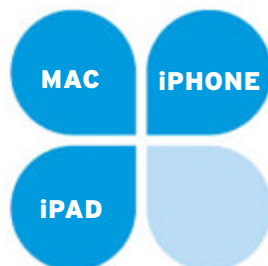


Back up the cloud: keep your online files safe **p36**



# Mac | Life

MAY 2015 NO.102



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**WIN!**  
AN APPLE  
WATCH **p35**



# Apple WATCH BUYER'S GUIDE

Your complete guide to choosing, using and loving Apple's new wearable **p22**

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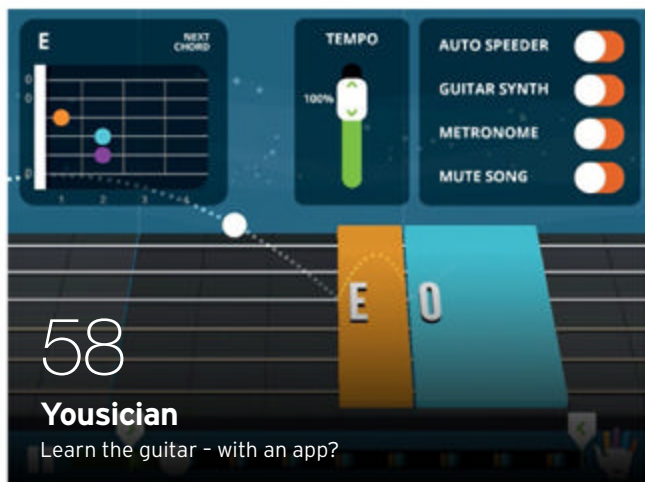
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### Photos for OS X

Don't lament the now-discontinued iPhoto - instead embrace its successor, Photos for Mac, and discover how it's even better than what came before.



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## Introducing Blackmagic URSA, the world's first user upgradeable 4K digital film camera!

Blackmagic URSA is the world's first high end digital film camera designed to revolutionize workflow on set. Built to handle the ergonomics of large film crews as well as single person use, URSA has everything built in, including a massive 10 inch fold out on set monitor, large user upgradeable Super 35 global shutter 4K image sensor, 12G-SDI and internal dual RAW and ProRes recorders.



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### Dual Recorders

Blackmagic URSA features dual recorders so you never need to stop recording to change media. That's critical if you are shooting an historical event, important interview or where you just cannot stop shooting! Simply load an empty CFast card into the second recorder and when the current card is full, the recording will continue onto the second card, allowing you to change out the full card and keep shooting!



### User Upgradeable Sensor

Blackmagic URSA features a modular camera turret that can be removed by unscrewing 4 simple bolts! The camera turret includes the sensor, lens mount and lens control connections and can be upgraded in the future when new types of sensors are developed. This means your next camera will be a fraction of the cost of buying a whole new camera! Choose professional PL mount, popular EF mount and more!



### Built in On Set Monitoring!

Say goodbye to bulky on set monitors because you get a massive fold out 10 inch screen built into Blackmagic URSA, making it the world's biggest viewfinder! The screen is super bright and features an ultra wide viewing angle. URSA also includes two extra 5" touch screens on both sides of the camera showing settings such as format, frame rate, shutter angle plus scopes for checking levels, audio and focus!



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## CREATURE COMFORTS



**COMPROMISES ARE** always made when developing a product, and you can tell a lot about a company by what it prioritizes. At Apple, aesthetics, ease of use, and comfort tend to take precedence. Since you're holding a copy of *Mac|Life*, we assume you value those qualities as well. But it can be difficult to define exactly why we prefer Apple devices, or defend them against friends who prefer PCs and Android phones. Compared to raw processing power and customizable hardware, how important is it really for a product to be a little bit thinner or lighter? Pretty darn important, actually.

The folks at Apple talk about tech in terms of the experience it provides, about the intangibles involved when incorporating it into our lives. As Steve Jobs put it, "It's technology married with liberal arts, married with the humanities, that yields the results that make our hearts sing." Such lofty words can sound like melodramatic marketing speak, but it's all true. Apple's success lies in the attention it pays to every aspect of a product, not just the traditional tech specs.

The new 12-inch MacBook is a perfect example. It's the thinnest, lightest laptop ever, with a new kind of keyboard and trackpad, and new colors. It's also the slowest MacBook on the market, and has just a single USB-C port to service both the power adapter and accessories. Still, many users will take the trade-offs. People want something comfy to use on the couch; that can be easily carried; that looks good. When the hardware is at least powerful enough to get the job done, we buy based on features we want rather than need. Apple gets this.

Change isn't always painless. Of course, it can at first be jarring to make do with a single MacBook port, to forgo Flash on iPhone, or settle for an external CD/DVD with your iMac. But you don't achieve what Apple has without shaking up the status quo. Processing power, memory, screen resolution – those can only take us so far. Most computers, phones, and tablets can handle anything the average user throws at them. What matters then is how we feel about a product, and making someone love a device is much harder and more interesting than simply giving it to them.

**CHRIS SLATE**, Editor-in-Chief  
Twitter: @ChrisSlate

## >>> THE TEAM



**Matt Bolton**  
**Editor**

Matt's *Apple Watch* of choice is Steel with Milanese Loop. He's flashier than he looks



**Mat Gartside**  
**Deputy Art Editor**

Mat has a watch, so doesn't need OH FINE he'll have the awesome black one.



**Jo Membery**  
**Operations Editor**

Jo's planning to get a Rose Gold Edition, once she gets her heist crew together...



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## LETTER OF THE MONTH



With the news that a cable-free HBO subscription is coming to Apple TV, and the fact that many consumers are unhappy with their cable providers, could we see a new Apple TV in the future? I've purchased two more boxes since the price dropped, and I'm ready to cancel cable if more channels go a la carte. Your thoughts? **BARBARA DICICCO**

If recent rumors are true, a new Apple TV could be announced at the June keynote to Apple's Worldwide Developers Conference, if not sooner. (Maybe it's already happened by the time this sees print!) The upgrade is said to include an app store, Siri integration, more storage, and a more powerful processor, all of which are long overdue for the device. Apple is also said to be working up its own cable-type package of channels. The folks at Apple have been teasing about something big for TV for quite a while now – here's hoping they deliver!

### House Thief

HomeKit is good in concept, but what happens when someone steals your iPhone/iPad/iPod? Instant failure. You might think, "Hey, they don't know where I live," but you'd be wrong since most people put their addresses on their device. So basically, as soon as your phone is stolen, you kind of lose your house.

**JACK H.**

**Someone who decks out their home with advanced, hi-tech security is going to put a passcode on their phone (and use Touch ID, if available). Problem solved.**

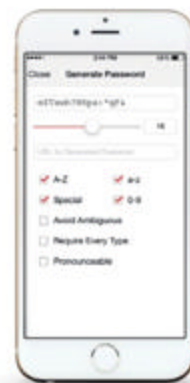
### Tragic Reviews

As your magazine begins its "second century," I would like to make a suggestion: I think we need to see more review scores at the "Tragic" end of the spectrum. Not just to publicly say, "this stinks"

– after all, every product represents someone's hard work – but to warn users of hardware and software that absolutely will not suit their needs. I've personally been burned by products that weren't at all what they should have been. We're all interested in things that are "Great," "Excellent," and "Awesome," but some more warnings might be appreciated by your readers.

**BOB SCUTELLARO**

**You raise an interesting point, Bob. Since we don't have the time or page space to review every single product on the market, I've always felt our first priority is to point people toward the good stuff. I do think it's worth reviewing something bad if the product is likely to draw a lot of attention – as you say, people need to be warned. But if you don't see lots of low scores in Mac|Life, it's because we don't**



Security concerns continued: LastPass Premium comes highly recommended.

**want to bore you with junk most readers won't care about.**

### Password Suggestion

Your answer to John Mayberry's request for password management tools (March 2015) was on point, but I'd like to drop another recommendation into the mix: LastPass. I've been using the Premium edition on my MacBook Pro, iPad, and iPhone for a couple years now, and speaking as a seasoned Road Warrior (30+ years of working on tour) and charter *MacAddict*/*MacLife* subscriber, I couldn't be more satisfied. I'm not a big fan of cloud computing as a rule – the phrase even parses as "clown computing" to me – but I haven't been let down by the LastPass server security. Being able to churn out hyper-secure 32-character passwords just makes me happy.

**DAVE VICK**

**Thanks for the recommendation! For anyone interested, LastPass can be found in the Mac App Store. It's free on Mac, but sharing passwords with iOS devices requires LastPass Premium, which is \$12 a year.**



If you're investing in HomeKit, be sure to invest in a passcode too.

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## The MacBook is the new MacBook Air

It's 2008 all over again as Apple releases a new laptop that's thinner and lighter than ever, with low power and few ports

BY MATT BOLTON & GARETH BEAVIS

**"THE DEFINITION OF** portability has changed in the last several years, led by iPhone and iPad," said Apple's CEO Tim Cook as he introduced the company's newest Mac. "So we challenged ourselves to take everything we had learned in designing iPhone and iPad, and do something incredibly ambitious and bold. We challenged ourselves to reinvent the notebook. And we did it."

The MacBook is the result of Apple's endeavors. It's a 12-inch notebook with a Retina display, dual-core Intel processor and all-day battery life. At half an inch thick, it's easily the thinnest ever Mac, and the lightest at 2lb – lighter even than the 11-inch MacBook Air. It offers just a single port for data, power and video output. It starts at \$1299 – a big increase over the MacBook Air's starting \$899.

As with many Apple launches, the enthusiasm for its originality should be taken with a pinch of

Please don't try  
this at home.



# USB Type-C - the MacBook's only port

Why Apple thinks you need only one connection in its latest notebook **BY MATT BOLTON**

salt. Certainly, this is Apple's most portable and even dramatic notebook, but we're not so convinced about the "reinvention" part. It's a thinner, lighter notebook, with fewer ports and less processing power. Haven't we been here before?

**IN 2008, THE MACBOOK AIR** was all of these things. More expensive than current models, more limited, and maligned by many because of it. But it was the future, and as technology evolved, it became powerful enough for 90% of people, and came down in price. The MacBook will likely do the same.

Even if the MacBook's lack of ports or its low-power Intel Core M processor (less powerful than the MacBook Airs'), seem off-putting, know that it's truly impressive in the flesh. Holding it in one hand is unnerving – you feel you could snap it if not careful – yet the balance is excellent, so it's steady when typing in difficult places. The keyboard uses new "butterfly" hinges that reduce its depth, which means travel is pretty minimal. We weren't blown away compared to using a trusty MacBook Pro, but the keys feel very solid, and it's great that it's full-size. The touchpad is a redesign too, using the same horribly-named Force Touch tech as the Apple Watch. It works well, simulating clicks and allowing presses of different forces to do different things. And the screen is bright, clear and beautifully sharp, of course.

We'll have a full, in-depth review of the new MacBook in a coming issue.

**A NEW, THINNER** MacBook means the need for new, thinner ports – well, a single new port as it turns out, and it's called USB-C. So how does this latest notebook get away with having only a strange new USB connection?

USB Type-C is a new connection standard, hot off the... thing that standards are made on. It's intended to be the future of USB, replacing the larger, clunky Type-A (normal rectangle USB connector) and Type-B (square-ish connector usually used on printers) plugs. It's reversible, like Lightning, meaning less of the in-and-out dance we've "enjoyed" with the old-style USB connectors. But, most crucially, despite being tiny, it's fast.

USB Type-C is based on the new USB 3.1 standard, which can support transfer speeds of up to 10Gbps – not as fast as Thunderbolt, but still very fast. The first-generation MacBook won't be able to reach those speeds, though – it's using USB 3.1 "gen 1," which is limited to 5Gbps, the same as the USB 3.0 standard used in current Macs. There are other benefits to using USB 3.1, though.

USB-C is versatile, but is one port really enough?

The main thing is its ability to deliver more power than older USB connections. The power brick for the MacBook delivers 29W of juice, which requires the special USB Power Delivery standard. Type-C enables this, so it can be the MacBook's power port.

Type-C also offers an alternate mode specification for video, which means it can be used to send native DisplayPort 1.2 or HDMI signals, potentially even at 4K resolutions. It can send data down the cable at the same time as the video, meaning that a compatible display could act as a connection hub. Power can be sent through the cable at the same time as all this, so a single cable could truly dock your MacBook at your desk.

Of course, most of this is exactly what Thunderbolt does (and does it faster), so why not stick with that? Size would seem to be the answer – Thunderbolt's connection just wouldn't fit on something as thin as the MacBook. And Type-C's performance and power capability make it a perfectly viable (and cheaper) alternative. Still... we wish there were two ports.



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Be a space mining company, and buy out your rivals to win. Choose your approach carefully, though: you can only mine so many spots. Once you've done that, you've got to play the market, selling high and buying low. It feels a bit light at the moment, but company types add interesting strategy.

VERSION TESTED: 0.1.5062



JUMPJET REX \$9.99

Rex is a dinosaur with jetboots and a mission to save the world. This retro platformer is all about 2D exploration with movement mostly being through jumps and boosts – like a more developed Flappy Bird. It's great fun (best with a controller) already, with tight controls and personality pouring out of every pixel.

VERSION TESTED: 0.5.6



# Will ResearchKit save the human race?

Okay, no, scientists will. But ResearchKit could help

BY MATT BOLTON

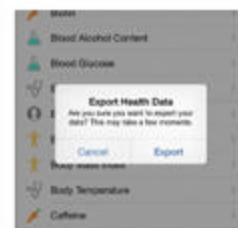
**WHEN APPLE FIRST** revealed the Health app in iOS 8, it mentioned being able to send data to your doctor to help with diagnoses, but not much has been said about that since – until the reveal of ResearchKit in March. Taking this idea to the next level, ResearchKit is an iOS dev tool that allows medical researchers to build apps that collect data useful to finding out more about a person's health conditions, so they can work on more effective treatments. It sounds fantastic, really.

Why would medical researchers need this particular channel of information? It all comes down to the

amount of data – typical medical surveys will have a limited number of participants based on location and access. But with a billion iOS devices out there, reaching people purely through the easy access of apps means they can get much higher numbers of participants, which means better data – and better data means more effective, worthwhile results. We've already seen rollouts for apps covering medical issues such as asthma (where broad geographical coverage is useful), diabetes, heart disease and many others.

As ever, Apple has put a focus on privacy, with each trial requiring

you to sign a consent form if you want to take part. However, there are still concerns over how ResearchKit data is handled – it might be private on Apple's end, but how well will data be anonymized by the research institutions? Is there suitable age-gating in the consent forms? ResearchKit is already looking hugely promising, but it also comes with unique ethical problems...



Your Health data could help to cure diseases.

## >THE SHIFT

Back to the Mac... again. **DAVID CHARTIER** looks at how iOS principles are informing the latest decisions when it comes to Mac software



**I**N 2010, **APPLE** announced it was going “back to the Mac,” applying lessons to OS X Lion that it learned from the wild success of iOS and the just-released iPad. New, iOS-inspired features such as Launchpad and fullscreen apps definitely made it easier to launch apps and focus on one’s work. This ideal has gradually caught on with Mac developers and customers, and now it feels like Apple and the community are back for round two – albeit in a subtler way – of simplifying work and play on OS X.

**A HERALD OF** this new wave of Mac simplicity is Apple’s forthcoming Photos for Mac. Initially available as

part of a public beta of OS X 10.10.3, Photos for Mac is, on the surface, Apple’s replacement for both iPhoto and Aperture. However, it’s also a significant effort on a number of levels to bring the iOS interface and under-the-hood architecture to OS X. For us regular users, it looks like the version that over 700 million iPhone and iPad customers are familiar with, and it works much as you would expect from the offspring of an iPad app and a Mac app.

Under the hood, Photos for Mac is built with a new framework (tools that make certain developer tasks easier) from Apple that is more or less an equivalent of an established iOS framework. Again, Apple is transferring iOS elements to the Mac to simplify a variety of tasks, some for consumers, some for developers.

**APP EXTENSIONS IN** iOS and OS X are another great example. OS X has long had ways to help apps exchange information and work together, but they were rarely easy to set up. For instance, enabling your task manager to collect new tasks from other apps often involved manually installing a separate helper app or, worse, digging into your library files and hoping for the best. With OS X Yosemite, extensions get installed silently alongside an app, but they

remain disabled to keep your interface clean and just the way you like it. If you want to use an extension, it’s just a flip of a switch.

**THE NEW CONTINUITY** features in OS X Yosemite, particularly Handoff, are arguably the greatest recent expression of this ideal of simplicity. Handoff is a one-click or one-swipe way to instantly move just about anything you’re working on between your Mac, iPhone and iPad. There is

### Apple is transferring iOS elements to the Mac to simply a variety of tasks

no saving a file somewhere and digging it up on another device and no drilling down through folders – it just appears on the next device you need, right where you left off. Your work is what matters, not the device you use to create it.

Naturally, this simplification of tasks actually means that some muscle memory might need a bit of retraining, and old habits might need a few adjustments. But these days, a cent (of your time) spent learning these new tools will be a dollar earned.



Apple has been putting iOS peanut butter in OS X’s chocolate, and doesn’t look set to stop.

»» David Chartier is content strategist at AgileBits, developer of 1Password, and a writer with vast experience in analyzing the tech world. He runs the website *Finer Things in Tech* ([finerthings.in](http://finerthings.in)) and hosts its podcast, The Finer Things In.

# 6 criminally little-known Mac games you should play today

Some of the smartest gaming experiences on OS X aren't on the Mac App Store

BY MATT BOLTON



Dive, dodge and dogfight your way through permanently imminent death in the brilliant, frantic 2D shoot-'em-up Luftrausers. You'll be battling planes, ships, missiles and giant militarized blimps.

**SINCE THE LAUNCH** of the App Store on iOS, iPhones and iPads have had a reputation as the place to go for cool, quirky original gaming experiences from independent developers. But the Mac has been getting better than ever for games during that time also – there are many more big-name releases, but it also gets loads of brilliant little experiences. Some are tiny high-score gems, polished to perfection. Some are puzzlers that will keep you entertained for hours. Some are personal projects, showing how games can communicate with us in ways unlike any other media. And one is a game where you go on dates with pigeons. You'll find these games on Steam ([steampowered.com](http://steampowered.com)), rather than the Mac App Store, though you can buy many direct from the devs, giving them a bigger cut of the price.

1

## The Stanley Parable

This hilarious game asks what would happen if you went against its own rules, as described by a narrator who gets increasingly emotional as you ruin all his plans.

2

## Luftrausers

Pilot a prototype insane fighter jet against hordes of enemies in this 2D high-score shooter. It's all about maneuverability and customization – you build planes that perform



You're off to high school. At a school for birds. Hatoful Boyfriend offers avian weirdness.



A prime example of a simple but effective game, Hexcells is an addictive minimalist logic puzzle.

differently depending on the parts you unlock. Huge, huge fun.

which to save or clear. It's lovely engaging puzzling.

3

## Depression Quest

This text game brilliantly portrays suffering with depression – you'll try to live your life, choosing options to get through various situations, but depending on your mental state, there are some courses of action you simply can't choose, even if you know they're the best ones.

5

## The Binding of Isaac

The gameplay here is simple: survive for as long as you can in a randomly generated 2D dungeon. But it's also personal and adult, touching on themes of child abuse and neglect.

6

## Hatoful Boyfriend

Join an elite school for birds in a post-apocalyptic world full of intelligent avians, and see if you can find love among the branching storylines and glorious artwork. Of jock doves.

4

## Hexcells

Like Minesweeper, but great. Each level is a pattern of hexagons, and you use numbers on the hexes to work out



## >GAME LOOP

The gaming scene is bigger than it's ever been, but **BRIANNA WU** wants to know why half of its population is being ignored



**M**ADELINE MESSER is only 12. She's a gamer, and she's frustrated. In a *Washington Post* article that went viral, she asked, "Why don't any of the characters in my iOS games look like me? Why do I have to pay to play as a woman?" It's a question worth asking, Madeline. I've been asking it since 1985 when my parents got me a NES. The difference is that back then only 3% of gamers were women. Today, it's 52%.

**ON THE APP** Store today, they tout a category called "Princess Play," hoping to meet the needs of that 52%. I've played every game in it, and the pickings are embarrassingly slim, and many alienate women gamers more than they draw them in.

Going through the list, *Dragon's Lair 2* has you playing as Dirk and rescuing the very sexualized Daphne. *Fat Princess* has long garnered the ire of women gamers for limiting women to damsels in distress, force-feeding them cake so they're harder to kidnap. It's amazing to me that during my lifetime games have done so little to include women.

After all, Madeline is not the only girl gamer who wants to be represented. A recent study showed that women players strongly prefer playing as a character of their own gender, whereas men didn't mind

so much. As a matter of game design, including women protagonists is best practice; ideally, both should be included, particularly on iOS, where the gender mix of players is even.

When did the disparity start? Many of Atari's early game designers were women, and lots of early games had genderless protagonists. Things started to shift in 1985 with the NES, which Nintendo marketed less as a game system and more as a toy – specifically one for boys under 10.

**AS A PROFESSIONAL** game developer, I can tell you there's a fundamental disconnect between the people developing games and people consuming games. Intellectually, the developers here understand they need to make games appealing to women – but it doesn't end up being an engineering priority.

*Crossy Road* is a fantastic example of good developers making a game that inadvertently excludes women. I love this game, and I know people on their development team who would be embarrassed to be excluding anyone. But the only woman in the game's character roster is "Celebrity," whom you pay to unlock. She explodes with cash particles when a truck hits

her. It's a cute sight gag, but it's not the best representation.

This can be a simple problem for iOS developers to solve: just include women in the game. The production costs are often lower compared to the costs of a console title. *Draw to Kill* developer Brian Mattucci made including a woman ninja in his sprite-based game a priority. "It was pretty trivial," he told me. "It took about an hour to implement it."

I directly credit the iPhone for the explosion of women gamers, giving them an intuitive entry point that consoles could never provide. iOS can be the best gaming market in the world for women gamers – but devs need to remember that our players aren't just teenage boys anymore.



Why are women game stars, like Lara Croft, such a rarity?

>>> Brianna Wu is the head of development at Giant Spacekat, developer of *Revolution 60* on iPhone and iPad, and is a regular speaker at industry events, as well as host on the podcasts *Isometric* and *Rocket*.

# CRAVE

THE GEAR WE'RE LUSTING AFTER



## 1 Hackaball

[www.hackaball.com](http://www.hackaball.com)

\$TBC

>>> Teaching kids logic and programming through games is nothing new, but this Kickstarter is one of the coolest ways to do it yet. It's an actual ball - made of tough stuff so it can be thrown around - full of LED lights and sensors. The idea is that kids can come up with ways Hackaball can be used in games, and then program it themselves, using an intuitive iPad app. Maybe it's a bomb that "explodes" by rumbling and lighting up at a certain time; maybe it's a pet that makes noise when moved too harshly... it's up to them!

## 2 Stamina WIRK Linea Standup

[www.staminaproducts.com](http://www.staminaproducts.com)  
\$279

>>> This isn't quite the kind of design icon that we usually feature here, but it could help keep you much healthier. Standing desks can really help with your posture, and this small, wheelable desk offers both a way to work standing up as well as an ergonomic seat. Adjustable surfaces make it useful for different purposes from drawing to typing, but the key thing is that it takes up so little room - you could have one alongside your regular desk (provided you use a laptop), or it would make a great replacement in smaller houses. The standard price is around \$400, but you can find it much cheaper than that online.



## 3 Native Union CLIC Marble

[www.nativeunion.com](http://www.nativeunion.com)  
\$79

>>> We seem to be in the minority when it comes to coveting this gorgeous iPhone case - lots of people we've enthused about it to have said it sounds like a terrible idea - but the good news is that they're wrong and we're right. It's not out yet as we write this, but we've held a final version, and it's so nice. The polished layer of marble on the back feels totally different to any other case, in the best possible way. Oh, and Native Union will make matching Watch stands...

## 4 PowerShade

[www.powershade.co](http://www.powershade.co)  
\$289

>>> Days at the beach are great, until your iPhone battery runs out and you have to stop posting pictures on social media and reveling in other people's jealousy. Or maybe that's just us. Still, our problem is solved by the PowerShade, which is a beach umbrella covered in solar panels. There are two USB ports and even an AC socket on the pole, so you can keep a Kindle, iPad or wireless speaker charged. PowerShade's creators say that with clear, strong sun, it should charge devices at the same speed as a normal outlet. It's on Kickstarter as we write, due for a June delivery.



# \$50 iTunes Card

How would you blow 50 bucks on music, movies, books, TV shows, and apps?

BY MATT BOLTON



1

## BECOMING STEVE JOBS

Brent Schlender,  
Rick Tetzeli  
**\$12.99**

Steve Jobs' official biography (by Walter Isaacson) disappointed many people, including Jony Ive (as revealed in a recent profile). This new book has already received a much warmer response, and it includes contributions from Ive, Tim Cook and many other important figures at Apple, Jobs' widow Laurene Powell Jobs, and Disney's Bob Iger. Schlender knew Jobs for 25 years, and that level of familiarity and understanding comes through vividly in the book, producing fascinating stories, thoughtful memories and uniquely close insight into Jobs's personality.

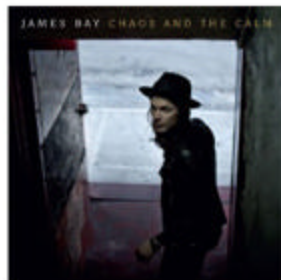


2

## INTERSTELLAR

Matthew McConaughey,  
Anne Hathaway  
**\$19.99 HD**

Having escaped the shadow of his "Dark Knight" Batman trilogy, Christopher Nolan turned to sci-fi for his follow up, taking cues from *2001: A Space Odyssey* as much as any recent influence. As the Earth becomes unable to sustain life, a small group of astronauts looks to find an inhabited planet to start a new human colony and save our future. The trip bends time and space, turning days for the astronauts into... well, let's just say "longer" than here on Earth. Not everyone loved *Interstellar*, but we adored its scale, its pace and the brilliant performances by its unfairly talented cast - especially McConaughey.

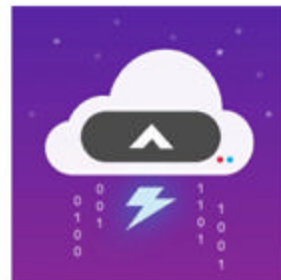


3

## CHAOS AND THE CALM

James Bay  
**\$9.99**

This English songwriter uses his throaty, soulful voice to full effect on this debut album, alternatively roaring and crooning his way through songs that drip with quality in their production and arrangement, but without losing a pleasingly raw sound to the instruments. It feels like it could all be coming at you live, from the one-man-and-his-guitar personal sound of "Scars" to the energetic foot-tapping flat drums and buzzing guitars of "Best Fake Smile." Producer Jacquire King's history with the likes of Kings of Leon and Norah Jones no doubt helps, and is the perfect fit with Bay's catchy, open songs.



4

## CARROT WEATHER

Grailr LLC  
**\$3.99**

Siri can tell you about the weather in a natural, almost human-sounding way, but wouldn't you like something to let you know if it's raining with a bit more... sass? Well, okay, maybe not, but CARROT Weather does it anyway, and it's fun! It's also (perhaps more importantly) full of really useful weather information (powered by the highly accurate Forecast.io service), but it's nice to use something with a bit of extra personality to it.

TOTAL SPEND  
**\$46.96**



# Remember when typing **felt good?**



## tactile pro™

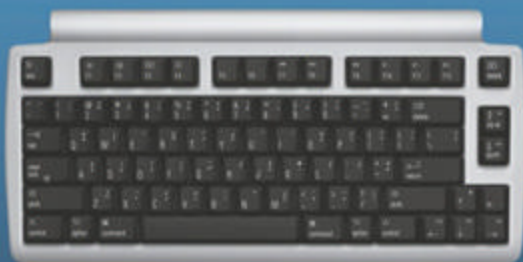
Mac users who crave the **satisfying “click”** of Apple's legendary **Apple Extended Keyboard** will LOVE the **Tactile Pro**. Unlike other keyboards made these days, each key is built on a premium ALPS mechanical switch. They feel better and you'll type faster.



## quiet pro™ & laptop pro™

**Clicky** keyboards feel and sound great, but may be too noisy for certain settings. Perhaps you have office mates (or house mates) who don't appreciate loud keyboards as much as you do. For those places, we make the **Quiet Pro** and **Laptop Pro**.

They give you that satisfying **click** feeling, without the excessive click sound.



[www.matias.ca](http://www.matias.ca)





# Apple Watch Buyer's Guide

Is it right for you, and which one should you get?  
This is your in-depth guide to Apple's latest creation



**WHEN APPLE SAYS**  
the Watch is the most  
personal product it's  
ever made, it's not  
exaggerating. It's not

just that it's something that sits on  
your skin all day (even the iPhone  
stays hidden in your pocket or bag  
most of the time, no matter what  
people say about your social network  
habits), but that it also gains lots of  
information about you and your  
habits, and that its visibility means it

needs to be something you're totally  
happy with in terms of style. This is  
why Apple offers it in a huge range of  
styles, different sizes and different  
finishes. And it's capable of serving  
a wide range of purposes, depending  
on how you set it up. Given all of  
this, you may not even be sure if one  
is right for you, and if it is, which  
one. That's what the next few pages  
are for – we'll look at everything that  
matters when it comes to buying the  
Apple Watch.



# Why would I want one?

Perhaps the most important question about the Watch is: just what will it do for me?

**▶ WHEN THE iPad** came out, there was a legitimate question over why someone would want one. What would it do for them? The Watch faces the same question: what will be better in my life if I get one? It's the old idea of a "killer app," and if you want to know what the Watch's killer app is, the iPad is actually a good guide. The answer is: there isn't one – with emphasis on the "one." Everyone might have a different use that makes it indispensable to them.

For some, it will be the health and fitness angles – it tracks your exercise, reminds you to avoid sitting for too long, measures your heartbeat and sends all the data to your iPhone. For some, it will be communication, letting you send simple messages to people with little effort,

or even tap them on the wrist from distance, and make and receive phone calls. For information obsessives, it will be notifications of every detail – your calendar events, reminders, emails, weather or Passbook data – everything from your iPhone a glance away.

It might be that apps such as OfficeTime, which lets you track your freelance hours or meeting lengths with a tap of the wrist, will make your life easier. Or that you're always losing the remote for your Apple TV, so the built-in Remote app sounds like heaven. Maybe it's instant Evernote access from your wrist, so you can record your precious thoughts whenever they occur (even in the shower). Maybe it's the ease of using Apple Pay to buy things without reaching into your pocket. Maybe it's being able to play music on a workout with taking an iPhone or iPod. Maybe... okay, that's probably enough.

We're not trying to actively sell you a Watch here, but to give you flavor of what it does – maybe none of this appeals to you, but maybe something here strikes you as being genuinely useful. Maybe that's what makes it good for you.

## FASHION & FITNESS

Apple has always made pretty things, and had an interest in fitness (remember its partnerships with Nike), but it's never had a challenge like the Watch. Its usual system of "one design fits all" doesn't work, so it's gone all out with over 30 different Watch options, which we'll cover over the next few pages. Leather bands, steel cases, 18-carat gold... it's a smart move, and it shows how serious Apple is. The same goes for the fitness elements –

there are already lots of activity trackers on the market, so Apple has made one of the most comprehensive ones out there.

Why put in all this effort? There are few people who will buy an Apple Watch for its fashion or fitness angles, but they might not buy it if it lacks them. Apple needs to get these elements right because it's what everyone already expects to be done perfectly. Apple seems to have got it right, but we'll see over time.



As usual with Apple, it's about more than just the tech on offer.



## FAQs

All the burning questions about the Watch – answered!

---

### What are the differences between models?

---

The Watch Sport is the cheapest model, with an aluminum case (available in Silver or Space Gray) and a strengthened “Ion-X glass” screen. It’s the lightest, at 1oz.

The Watch has a shining stainless steel case, in simple steel or in Space Black, and weighs more at 1.4oz. Its screen is made of ludicrously hardwearing sapphire, and it costs more than the Watch Sport.

The Watch Edition comes in 18-Karat gold or rose gold, with an exclusive selection of bands to match. It has a sapphire screen too, and is the heaviest model at around 1.9oz. It’s *very much* the most expensive.

---

### Are there any differences other than size between the 38mm and 42mm models?

---

Both models have Retina-level screens, but the 42mm model’s is larger and a slightly

higher resolution than the 38mm’s. Apple says the 42mm version offers better battery life than the 38mm version too, but hasn’t quantified it (the figures in the question at the bottom are for the 38mm model). Some bands are only available for certain sizes of Watch.

---

### What if I don’t want any of the band combinations Apple offers when I buy?

---

You can buy many of the bands separately, so you could buy with a Sport Band (the cheapest option) initially and then get the other one you want later.

---

### What sizes do the bands come in?

---

Lots! Bands for the 38mm models are smaller than their equivalents for the 42mm models. The Milanese Loop, Link Bracelet and Classic Buckle all come in only one size, adjustable for your wrist. The Sport Band comes in two sizes, and you get both in a pack, so you don’t have to choose. Only the Leather Loop and Modern Buckle bands come in distinct sizes you’d have to try on before buying.

---

### What can the Watch do without an iPhone nearby?

---

Apple Pay will still work, so you can buy things from participating retailers. You can listen to music stored on the Watch using Bluetooth headphones or speakers. Passbook will still work, to get you into events or onto flights. The fitness tracking will still work, ready to sync to your iPhone when it’s back in range. You’ll still be able to use it as a remote for your Apple TV or iTunes playback. And it can show you the time, of course.

---

### How long does the battery in the Watch last?

---

Apple’s aim was for 18 hours of battery life, and it says that it achieves that in a variety of real-use situations, including periods of interaction, receiving many notifications, and using it for constant fitness tracking during a workout. As ever, how much you use it will make a big difference – streaming music, for instance, will eat up power quickly. If the Watch’s battery runs too lower, it will enter Power Reserve mode, when all it does is display the time. In this mode, Apple estimates up to 72 hours of use.

---

#### How long does it take to charge?

---

Roughly two and a half hours to 100%. It can fast-charge up to 80% in just an hour and a half.

---

#### Is the battery replaceable?

---

Apple has confirmed that it is, but only through the Apple Store. No word on how much it will cost out of warranty.

---

#### Does it have any storage?

---

Yes – it has 8GB total, though only a small amount of that can be used flexibly. 2GB can be used to store music (so, you'd sync over just a good workout playlist, maybe)

and 75MB will be available for photos synced through iCloud (they'll be automatically resized for the Watch's small screen, so this space can hold more photos than it sounds).

---

#### Is it waterproof?

---

Not very. It's perfectly resistant to splashes, such as rain or when washing your hands, but Apple recommends that you don't submerge it. Specifically, the Watch offers IPX7 levels of water resistance, which means it can withstand being submerged by up to 1m of water for up to 30 mins. It's still a risk, though.

---

#### What warranty does it come with?

---

Apple's standard warranty, which is one year. Apple does sell AppleCare+ for the Watch, though, which extends your warranty to two years, and even includes two repairs for accidental damage (though you have to pay a service fee).

---

#### Where can I charge it?

---

The magnetic charging cable is USB, so you can charge it from a computer (or other device), or from a compatible wall adapter.

---

#### Which iPhones does it work with?

---

iPhone 5 or later, running iOS 8.2. No other iOS device will work with the Watch currently.

---

#### What do I get in the box?

---

The Watch, a magnetic charging cable, a USB power adapter for the cable and the band of your choice.

---

#### The Watch seems designed for right-handed use - what about left-handers?

---

You can wear the Watch on your right wrist, turned upside down so that the Digital Crown and button are on the left. When you first activate the Watch, you'll be able to set its screen orientation.

All you need to know about the Watch, revealed...





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**APPLE WATCH SPORT 38MM  
WITH BLUE SPORT BAND**

**Price** \$349 **Size** 38mm

**Case** Silver Aluminum

**Strap** Blue Sport Band

**Looks** Mildly funky - colorful without being garish



**APPLE WATCH SPORT 38MM  
WITH GREEN SPORT BAND**

**Price** \$349 **Size** 38mm

**Case** Silver Aluminum

**Strap** Green Sport Band

**Looks** Neon! Perfect for making a statement



**APPLE WATCH SPORT 38MM  
WITH PINK SPORT BAND**

**Price** \$349 **Size** 38mm

**Case** Silver Aluminum

**Strap** Pink Sport Band

**Looks** Not that pink, actually. Fun, but also smart/casual



**APPLE WATCH SPORT 38MM  
WITH WHITE SPORT BAND**

**Price** \$349 **Size** 38mm

**Case** Silver Aluminum

**Strap** White Sport Band

**Looks** Neutral and classy - good for all wearers



**APPLE WATCH SPORT 38MM  
WITH BLACK SPORT BAND**

**Price** \$349 **Size** 38mm

**Case** Space Gray Aluminum

**Strap** Black Sport Band

**Looks** Dark and fairly subtle - the smartest Sport option

**APPLE WATCH SPORT 42MM  
WITH BLUE SPORT BAND**

**Price** \$399 **Size** 42mm

**Case** Silver Aluminum

**Strap** Blue Sport Band

**Looks** Mildly funky - colorful without being garish



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**APPLE WATCH 38MM WITH  
BLACK LINK BRACELET**

**Price** \$1,049 **Size** 38mm  
**Case** Space Black Stainless Steel **Strap** Space Black Link Bracelet **Ideal for** Batman. Deep, classy and super-cool



**APPLE WATCH 38MM WITH  
BLACK CLASSIC BUCKLE**

**Price** \$649 **Size** 38mm  
**Case** Silver Stainless Steel **Strap** Black Classic Buckle **Ideal for** Serious meetings; people who like simple design



**APPLE WATCH 38MM WITH  
MILANESE LOOP**

**Price** \$649 **Size** 38mm  
**Case** Silver Stainless Steel **Strap** Milanese Loop **Ideal for** A bit of showiness - very cool and modern



**APPLE WATCH 38MM WITH  
BLACK MODERN BUCKLE**

**Price** \$749 **Size** 38mm  
**Case** Silver Stainless Steel **Strap** Black Modern Buckle **Ideal for** Serious, with a touch of jazz from the shiny buckle



**APPLE WATCH 38MM WITH  
BLUE MODERN BUCKLE**

**Price** \$749 **Size** 38mm  
**Case** Silver Stainless Steel **Strap** Midnight Blue Modern Buckle **Ideal for** Outfits that are smart, but with color

**APPLE WATCH 42MM WITH  
BLACK LINK BRACELET**

**Price** \$1,099 **Size** 42mm  
**Case** Space Black Stainless Steel **Strap** Space Black Link Bracelet **Ideal for** Batman. Deep, classy and super-cool



**APPLE WATCH 42MM WITH  
BLACK CLASSIC BUCKLE**

**Price** \$699 **Size** 42mm  
**Case** Silver Stainless Steel **Strap** Black Classic Buckle **Ideal for** Serious meetings; people who like simple design



**APPLE WATCH 42MM WITH  
MILANESE LOOP**

**Price** \$699 **Size** 42mm  
**Case** Silver Stainless Steel **Strap** Milanese Loop **Ideal for** A bit of showiness - very cool and modern



**APPLE WATCH 42MM WITH  
BLACK LEATHER LOOP**

**Price** \$799 **Size** 42mm  
**Case** Silver Stainless Steel **Strap** Black Leather Loop **Ideal for** Being unshowy, yet different to a plain buckle



**APPLE WATCH 42MM WITH  
BLUE LEATHER LOOP**

**Price** \$799 **Size** 42mm  
**Case** Silver Stainless Steel **Strap** Bright Blue Leather Loop **Ideal for** Keeping it simple, with a dash of color





**APPLE WATCH 38MM WITH BROWN MODERN BUCKLE**

**Price** \$749 **Size** 38mm  
**Case** Silver Stainless Steel  
**Strap** Brown Modern Buckle  
**Ideal for** Classic looks – weekends in the country



**APPLE WATCH 38MM WITH PINK MODERN BUCKLE**

**Price** \$749 **Size** 38mm  
**Case** Silver Stainless Steel  
**Strap** Soft Pink Modern Buckle  
**Ideal for** Playing it fun and casual, with class



**APPLE WATCH 38MM WITH BLACK SPORT BAND**

**Price** \$549 **Size** 38mm  
**Case** Silver Stainless Steel  
**Strap** Black Sport Band  
**Ideal for** A single look that works for sport or business



**APPLE WATCH 38MM WITH WHITE SPORT BAND**

**Price** \$549 **Size** 38mm  
**Case** Silver Stainless Steel  
**Strap** White Sport Band  
**Ideal for** A brighter, sportier statement band



**APPLE WATCH 38MM WITH SILVER LINK BRACELET**

**Price** \$949 **Size** 38mm  
**Case** Silver Stainless Steel  
**Strap** Stainless Steel Link Bracelet  
**Ideal for** Showing pure class. A truly classic look

**APPLE WATCH 42MM WITH BROWN LEATHER LOOP**

**Price** \$799 **Size** 42mm  
**Case** Silver Stainless Steel  
**Strap** Brown Leather Loop  
**Ideal for** Classic looks – weekends in the country



**APPLE WATCH 42MM WITH STONE LEATHER LOOP**

**Price** \$799 **Size** 42mm  
**Case** Silver Stainless Steel  
**Strap** Stone Leather Loop  
**Ideal for** Going casual in the garden in summer



**APPLE WATCH 42MM WITH BLACK SPORT BAND**

**Price** \$599 **Size** 42mm  
**Case** Silver Stainless Steel  
**Strap** Black Sport Band  
**Ideal for** A single look that works for sport or business



**APPLE WATCH 42MM WITH WHITE SPORT BAND**

**Price** \$599 **Size** 42mm  
**Case** Silver Stainless Steel  
**Strap** White Sport Band  
**Ideal for** A brighter, sportier statement band



**APPLE WATCH 42MM WITH SILVER LINK BRACELET**

**Price** \$999 **Size** 42mm  
**Case** Silver Stainless Steel  
**Strap** Stainless Steel Link Bracelet  
**Ideal for** Showing pure class. A truly classic look





**APPLE WATCH EDITION 38MM  
ROSE GOLD WITH WHITE  
SPORT BAND**

**Price** \$10,000 **Size** 38mm  
**Case** 18-karat Rose Gold  
**Strap** White Sport Band (Rose Gold) **Ideal for** Tennis lessons from Roger Federer

**APPLE WATCH EDITION 38MM  
ROSE GOLD WITH WHITE  
SPORT BAND**

**Price** \$12,000 **Size** 42mm  
**Case** 18-karat Rose Gold  
**Strap** White Sport Band (Rose Gold) **Ideal for** Croquet with Barack and Michelle



**APPLE WATCH EDITION 38MM  
ROSE GOLD WITH ROSE  
GRAY MODERN BUCKLE**

**Price** \$17,000 **Size** 38mm  
**Case** 18-karat Rose Gold  
**Strap** Rose Gray Modern Buckle **Ideal for** Lunch with friends. On your private jet

**APPLE WATCH EDITION 42MM  
GOLD WITH MIDNIGHT  
BLUE CLASSIC BUCKLE**

**Price** \$15,000 **Size** 42mm  
**Case** 18-karat Yellow Gold  
**Strap** Midnight Blue Classic Buckle (Gold) **Ideal for** Casual dinner. Before the Oscars



**APPLE WATCH EDITION  
38MM GOLD WITH  
BLACK SPORT BAND**

**Price** \$10,000 **Size** 38mm  
**Case** 18-karat Yellow Gold  
**Strap** Black Sport Band (Gold) **Ideal for** Working out in Bruce Wayne's gym

**APPLE WATCH EDITION  
42MM GOLD WITH  
BLACK SPORT BAND**

**Price** \$12,000 **Size** 42mm  
**Case** 18-karat Yellow Gold  
**Strap** Black Sport Band (Gold) **Ideal for** A day out on that Hawaiian beach you own





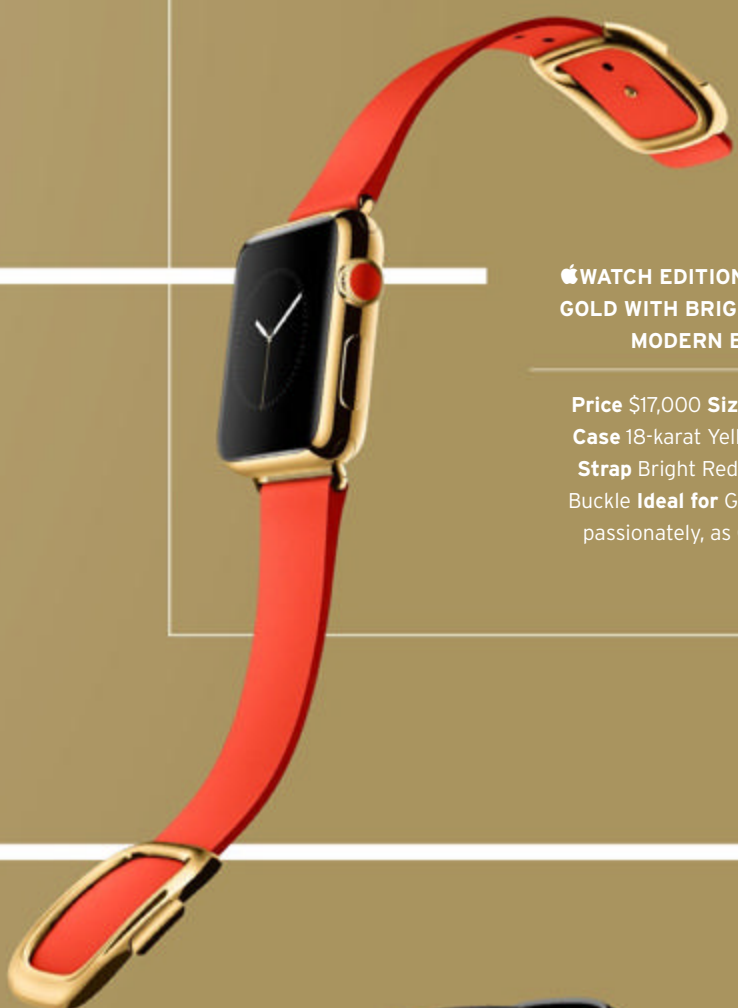
## THE EDITION ENIGMA

With the arrival of a Watch that costs \$10,000 (minimum), some are asking if Apple has completely disconnected from its audience.

The Watch Edition seems odd - Apple never bothered competing with the likes of Vertu in its phones - and there are lots of theories as to why Apple would want to go this route. Some have suggested it's being pushed by the fine-watch-loving Jony Ive, who wants to make his own mark on an industry he's admired for years. Some would say it's just to take advantage of the halo effect of going into high fashion - having this option ensures the Watch is on display not just in the Apple Store in your town, but also at some of the most prestigious fashion stores in the world, such as Selfridges in London and Maxfield in Los Angeles.


Apple has always made hay out of the idea that its products are equalizers; that you can buy the same laptop or phone as celebrities without paying crazy money to do it. The Watch Edition stretches that notion, but it still holds. You might not buy a gold one, but yours will still do all the same things in the same way.

And to some degree it's the loudest way for Apple to make its lifestyle statement to the world - that it's serious about merging technology and fashion.



### APPLE WATCH EDITION 38MM GOLD WITH BRIGHT RED MODERN BUCKLE

**Price** \$17,000 **Size** 38mm  
**Case** 18-karat Yellow Gold  
**Strap** Bright Red Modern Buckle  
**Ideal for** Gesturing passionately, as CEOs do



### APPLE WATCH EDITION 42MM GOLD WITH BLACK CLASSIC BUCKLE

**Price** \$15,000 **Size** 42mm  
**Case** 18-karat Yellow Gold  
**Strap** Black Classic Buckle (Gold)  
**Ideal for** Posh spies. Ostentatious posh spies.



#### X-DORIA DEFENSE EDGE

\$50

[x-doria.com](http://x-doria.com)

The Watch can track workouts, but you might be worried about scratching it in the gym. The X-Doria Defense Edge provides an aluminum shell and rubber inner casing to shield your Watch from bumps without affecting the sensors (though it only protects the case, not the screen).



#### TWELVE SOUTH HIRISE FOR APPLE WATCH

\$50

[twelvesouth.com](http://twelvesouth.com)

The most obvious (and popular) Apple Watch accessory is the nightstand, and few can compare to the Twelve South HiRise when it comes to looks. Simple and practical in design, it charges your Apple Watch while doubling as a display piece to show off your wearable wonder to the world.

#### PAD & QUILL LUXURY TRAVEL KIT

\$120

[padandquill.com](http://padandquill.com)

A stylish way to carry your Watch extras around, this pouch is made from full-grain leather and has space to store your Watch's charger cable, an additional band if you have one, and Pad & Quill's elegant wooden fold-out display stand. It's pricey, but sumptuous.



#### CASETIFY CUSTOM APPLE WATCH BAND

\$50

[casetify.com](http://casetify.com)

Looking for something even more personal than Apple's Watch band selection? Casetify lets you get a strap with any photo or image you want on it. Visit its website to upload your image and customize the band – and you can get a matching iPhone case while you're there, too.



Just like the iPhone, there will be loads of add-ons for the Watch. Here are some early favorites...

## An Apple Watch and a Twelve South HiRise stand

**E**verybody wants an Apple Watch, so here's your way to get one for free, along with a beautiful Twelve South HiRise for Apple Watch stand! The HiRise is crafted from metal in silver or black, and integrates the Watch's magnetic charger to keep it on display while charging. The sturdy HiRise holds any Apple Watch at an elevated height and angle that lets you interact with your watch while it's charging, making it a great bedside companion. It works with

any Watch band, and has silicone accents and a soft leather landing pad on back to protect expensive bands from scuffs while they rest. And the Watch's charger is easily removed for when you need to take it away with you. To find out more, visit [twelvesouth.com](http://twelvesouth.com).

We're giving away an Apple Watch Sport with White Sport Band (your choice of size) and HiRise for Apple Watch to a lucky winner, courtesy of Twelve South. To be in with a chance, answer this question:

**Out of what material is the Twelve South HiRise for Apple Watch made?**

- A: Plastic**
- B: Metal**
- C: Wood**

To enter, visit [woobox.com/8b4o5x](http://woobox.com/8b4o5x)

This competition closes on May 25 2015. For full terms and conditions, visit [woobox.com/offers/rules/8b4o5x](http://woobox.com/offers/rules/8b4o5x)





# KEEP CLOUD FILES SAFE

BY NIK  
RAWLINSON

What's not to love about the cloud? It's easy as well as convenient - but what if one of your online services goes down? Don't panic... here's how to back up your cloud files!

T

here are so many options when it comes to hosting your data in the cloud, you could almost do away with local data drives. iCloud, OneDrive, Google Drive, Evernote, Flickr, WordPress, Hotmail... the list goes on.

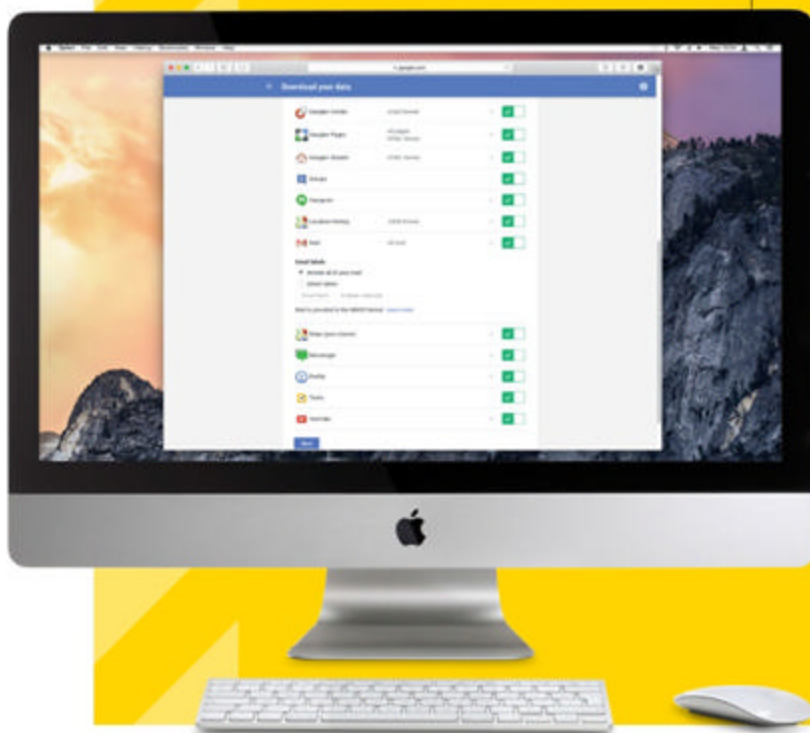
But what would happen if one of these services went offline? How much data would you lose? All your photos and emails? Months of work in an online office suite? If you think this is

melodramatic, then consider this less extreme scenario: a glitch on your line cuts off your broadband. Would you be able to carry on working, or would you be cut off from your files until your service came back?

Over the next few pages we'll show you how to make a backup of many services where data is stored in the cloud only by default (unlike iCloud Drive), in case they should ever disappear.

## 1

## Email



➤ Download emails from your Gmail account by first pointing your browser at [google.com/settings/takeout](https://google.com/settings/takeout) and logging in with the relevant Gmail account; this also works if you're managing your email using a personal domain hosted on Google servers using its Apps service. Select the data types you want to download (if you want to download just your email, click "Select none" and then check the box beside Mail). Click Next, select a format and whether you want to be emailed a link to the archive or have it saved to Google Drive. Compiling a mail database can take from several hours to several days, depending on how many messages it contains. You'll be notified when it's ready.

Yahoo Mail, Outlook.com and Hotmail users can't download messages directly this way, but there is a workaround you can perform using OS X's native Mail application. The trick is to first download the messages in the usual way and then archive them manually. Fire up Mail and pick "Add Account" from the Mail menu. Select "Other" from the account type options and enter your address and password. Mail will automatically detect the rest of the settings and downloads the complete archive of your mail.

You can now copy the email messages to a secure folder on your Mac by selecting and dragging them out of the message list pane of the Mail app.

➤ Many of us rely on an online calendar, so it's good that it can be exported from Google: go to [google.com/settings/takeout](https://google.com/settings/takeout), select Calendar as the download, then click Next. Leave the download format as "Zip" and opt to be emailed when the file's ready.

To export your live.com (Outlook and Hotmail) calendar, log into [calendar.live.com](https://calendar.live.com), click the Share link and pick the calendar you want to

export. Ignore the address box and click "Get a link," followed by the first "Create" button. Copy the "Import into other calendar applications" link. To import the calendar into the OS X Calendar, click File > New Calendar Subscription inside the OS X app, then paste in the address you copied – but change "webcal" to "https" and change the Location dropdown to "My Mac" to store it locally.

## 2


## Calendar




## 3

## Photos

▶ One of our favourite iCloud features has been Photo Stream, which enables you to sync shots from an iPhone and iPad back to iPhoto and Aperture on the Mac. But with the switch to My Photo Library and the new Photos app coming, how can you back them up safely first?

OS X stores a copy of your Photo Stream in a deep folder on your Mac, but you can find and access it – and, optionally, back everything in there up by dragging a copy of its contents into another folder or onto an external drive.

**TO FIND THE** Photo Stream cache, go the Finder and hold  while clicking Go, then click Library and

let go of . Now navigate through the folders to ~/Library/Application Support/iLifeAssetManagement/assets/sub. When you get there, you'll see a screen full of folders. These folders contain the contents of your Photo Stream. Rather than opening each one in turn, press + to start a new search. Select "sub" on the new toolbar that appears at the top of the window, so you can restrict the results to just files that appear in the current folder. On the next line down, make sure the first drop-down menu is set to Kind and the second one is set to Image. You'll now see a window full of pictures, rather than lots of folders.

Click the Save button at the end of the Search line (where you clicked "sub" to restrict the search criteria above), give the result a logical name such as Stream, make sure the box beside Add To Sidebar is checked,

and then click Save. The Photo Stream link will immediately appear at the bottom of the Favorites section of your Finder sidebar. Now, whenever you want to access an image you've shot on your iPhone, you can get to it directly without first importing it through iPhoto or

Aperture. You can also, as we mentioned, quickly and easily drag a copy of each one onto an external drive for an immediate backup.

**IF YOU UPLOAD** your photos to Flickr and find that it's become your main place of storage for them, you can download them back out of it by logging into your account, clicking the photo you want to retrieve and then clicking the Download link immediately below the picture (on the far-right of the screen, within the black background).

If you need to download several images at once, turn to Bulkr ([clipyourphotos.com/bulkr](http://clipyourphotos.com/bulkr)) to automate the process. Once installed, click "Connect to Flickr" followed by "Authorize," then enter your username and password in the browser window that pops up, click Sign in, followed by "OK, I'll authorize it". Return to Bulkr and click the "Backup your photostream" button.

Bulkr lets you quickly and easily download the contents of your Flickr library.





## 4

## Videos

▶ Got a lot of videos? iOS and apps such as iMovie let you upload them to YouTube and other sharing sites. Not only does this make it easy to show them off, it also means you have a second copy online that you can download if you lose the originals.

You can find all of your YouTube uploads through My Channel in the YouTube site sidebar, but the quickest way to download them is through the Video Manager. Find this by logging in and directing your browser at [youtube.com/my\\_videos](http://youtube.com/my_videos).

The video manager displays a list of your uploads, with thumbnails representing each video, and an Edit button beside them giving access to more extensive controls. Click the down-pointing arrow on the end of the Edit button to access the download options and pick “Download MP4” from the menu that appears to download a backup copy to your Mac.

You can download each video up to five times a day, but to stop the service getting clogged up, you’re limited to downloading two an hour. Be aware, though, if you’ve added one of YouTube’s pre-approved audio tracks after uploading it, you won’t be able to download it at all.

Vimeo also allows all of its users – even those on free accounts – to download MP4 versions of their videos. To do this, log into your Vimeo account and then visit the main page of the movie in question (the page on which the general public views it, rather than its entry in your Vimeo dashboard). You’ll find a Download link, below the playback window.

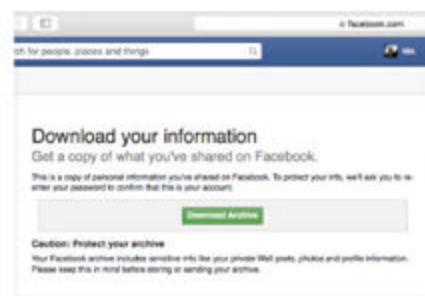
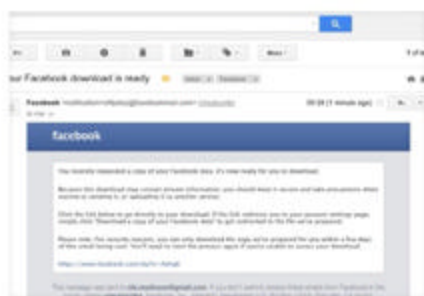
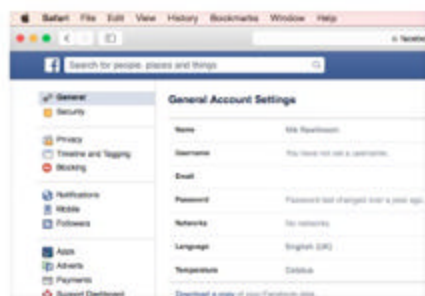
Paying to upgrade to a Vimeo Plus or Pro account enables you to access the original uncompressed upload, which will be more suited to editing if you later need to re-cut it.



Download MP4 versions of your YouTube uploads through the Video Manager.

## DOWNLOAD YOUR FACEBOOK PHOTOS

## 5



1 Log into your account and point your browser at [facebook.com/settings](http://facebook.com/settings).

This opens the regular settings screen from which you can change the way your account works and tweak your privacy settings.

2 Click the “Download a copy” link at the bottom of the page, followed by Start My Archive. Facebook will then gather all your assets and send a link to your email address when they’re ready.

3 When you receive your email, click the link to return to Facebook, click the Download Archive button and re-enter your password to download it. Your pictures are stored inside the Photos folder within it.

▶ You have two options if you're a Google Drive user: one for periodic downloads, which you'll need to remember to do every so often if you don't want to risk losing any data; and one for automatic downloads.

To manually download files, either use Google Takeout (see the Email section) or log in at [drive.google.com](http://drive.google.com) and select the files you want to retrieve (hold **⌘** while clicking to select several non-contiguous files, or hold **⇧** to select several that sit side by side in the list). Then click the "More actions" button (the vertical dots on the toolbar above the file listing) and pick Download.

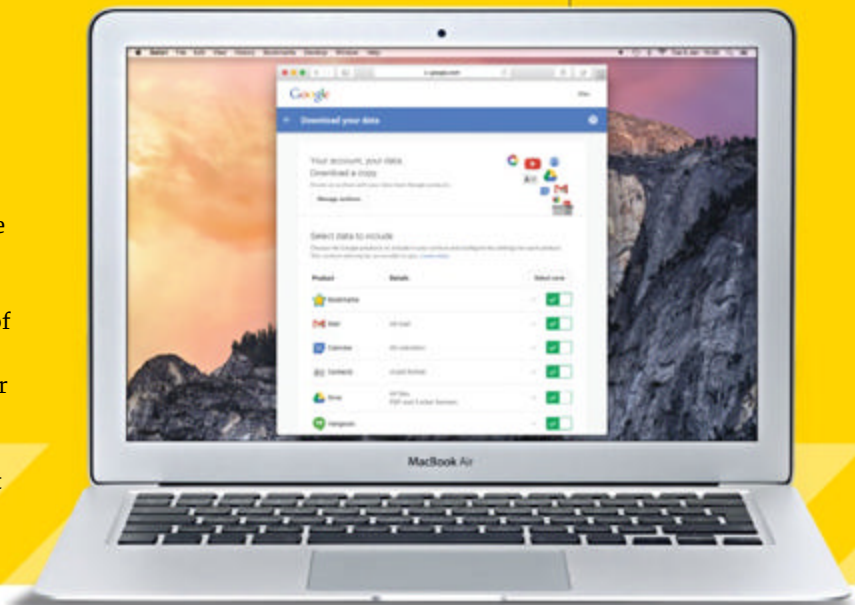
**GET GOOGLE DRIVE CONTENTS** To automatically mirror the contents of Google Drive on your Mac, download InSync ([insynchq.com](http://insynchq.com)). It costs \$15 per Google account, but there's a 15-day free trial before you have to start paying. Once you've fed it your Google account details, it sets about downloading each of your documents to your Mac, placing them in a Google Drive folder inside your local user folder. Drag this into the Finder sidebar to make it easier to find.

Whenever you create a new document on Google Drive, InSync copies it and

translates it into Microsoft Office formats, compatible with Pages, Keynote and Numbers. This allows you to edit them locally – not just on Google Drive. If you use Office 365 and save your files to OneDrive, sign in at [onedrive.com](http://onedrive.com) and hover over any document you want to download. A checkbox appears in its top-right corner. Check the box, then click the Download link. If you've selected several files they'll be bundled together into a zip file and dropped into your Downloads folder.

## 6

## Office documents



## 7

## Contacts

▶ You can export your address book via Google using its Takeout service (see Email, on page 39) and translate it into the vCard format. This is an industry standard that you can import into the OS X Contacts app and sync to iOS, as well being accepted in nearly every other app that deals with contacts management.

If you're using Outlook.com or Hotmail, click the grid icon on the banner at the top of the screen and pick "People" from the menu. Microsoft prefers CSV format (comma separated values). Select the

contacts you want to export (or just select nothing to export them all) and pick "Export for Outlook.com and other services" from the Manage menu.

Finally, if you want to save from Yahoo point your browser at [mail.yahoo.com](http://mail.yahoo.com) and pick the Contacts icon immediately below the Yahoo Mail logo. Check the boxes beside the particular details you want to save, then click the Actions menu, pick Export and choose a format (we'd recommend vCard Single File) before clicking Export Now.

## 8

## Online notebooks

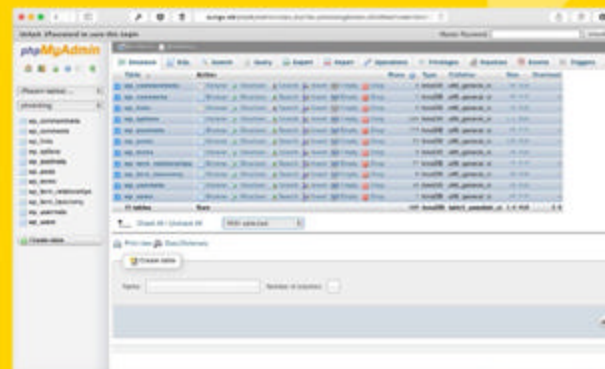
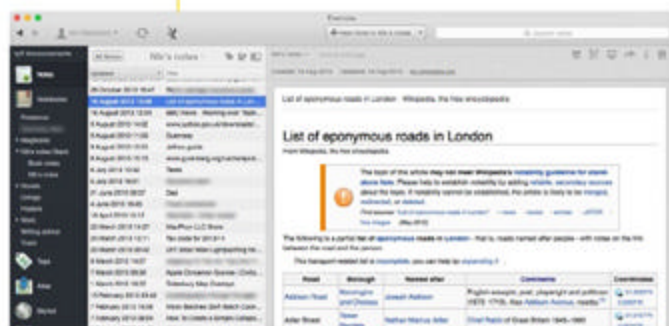
➤ With Evernote, your notes are automatically downloaded to the local client. So long as you keep this up to date, you can use it to export notes in HTML or XML by navigating to the note you want to export, right-clicking it (or **⌘**-clicking), selecting **Export Note** and choosing your format: HTML if you want to be able to read the note yourself; XML if you just want a machine-readable backup.

It's more complicated if you use Microsoft OneNote. The simplest solution is to export your OneNote notes as PDFs by picking "Save as PDF" from the File menu.

If you do still want to grab a copy of the original data, it's cached on your Mac as it passes from the server to OneNote, at `~/Library/Containers/com.microsoft.onenote.mac/Data/Library/Application Support/Microsoft User Data/OneNote/15.0/OneNoteOfflineCache_Files/` (~ denotes your user folder).

The files are hidden, so to see them launch Terminal (in Utilities) and enter **defaults write com.apple.finder AppleShowAllFiles YES**. Then press **⌘**, right-click the Finder on the Dock and click Refresh.

Evernote exports HTML and XML versions of your notes by right-clicking them.



Export the raw contents of your blog database from the database control panel.

## Web database

## 9

➤ If you want to save a body of work from a blog or website, most people will be fine with the export options on the next page. Pro bloggers might prefer to back up the blog database manually (and this will be the only option if your platform doesn't have an export option). The most commonly used blog database is MySQL and your host will have sent you details of how to access it, often through your hosting account control panel and often using phpMyAdmin. Details should in your welcome email.

Log in, then click the name of the database used by your blog in the sidebar. In most cases, there will only be one entry here. This displays a list of all of the tables of data that make up your site. Click **Check All** at the bottom of the table, then select **Export** from the **With Selected** menu. Leave the options on the following page at defaults and then just click **Go**.

To import it later, click the name of the database in the sidebar, click the **Import** tab and navigate to the file you've just downloaded. Click **Go**.



## 10

## Blog export

➤ Handily, WordPress has export options built into its core settings. If you're running a self-hosted blog on web space you've paid for, hover over Tools in the sidebar and pick Export from the menu. Select the type of content you want to export (or leave it set to All content) and then click Download Export File. The result is a WordPress-specific XML file that you can then import into another WordPress installation.

The process is the same with blogs hosted at Wordpress.com, except for the addition of an intermediate step immediately after clicking Export, when you'll need to choose whether to opt for the free or paid-for service. Pick Export (free) and follow the steps above.

**OF COURSE, BACKING** up your self-hosted WordPress blog manually is tedious and relies on you remembering to do it yourself (we'd recommend setting a Calendar reminder). We'd therefore steer you towards automating the process using BackWPup. Sign up for (or log into) a Dropbox account, then log into your WordPress blog, hover over Plugins in the sidebar and click Add New. Search the plug-ins library for "backwpup," then install and

activate it from the list of results. This creates a new BackWPup entry in the sidebar. Hover over this and click Add New Job, give the job a name (such as "Weekly backup") and click inside the checkbox next to "Backup to Dropbox" further down the first screen. Specify when the backup should run on the Schedule tab (we recommend "with WordPress cron") and tell it what it should back up on the DB Backup and Files tabs. Finally, click the "To: Dropbox" tab and authorize the plugin to write to your Dropbox cloud storage (this shouldn't need you to supply further details if you've logged into Dropbox before downloading the plugin).

To back up a Tumblr blog, use the Tumblr2WordPress tool at [tumblr2wordpress.benapps.net](http://tumblr2wordpress.benapps.net). Enter your username, choose HTML as the export format, leave everything else as default, and click Export.

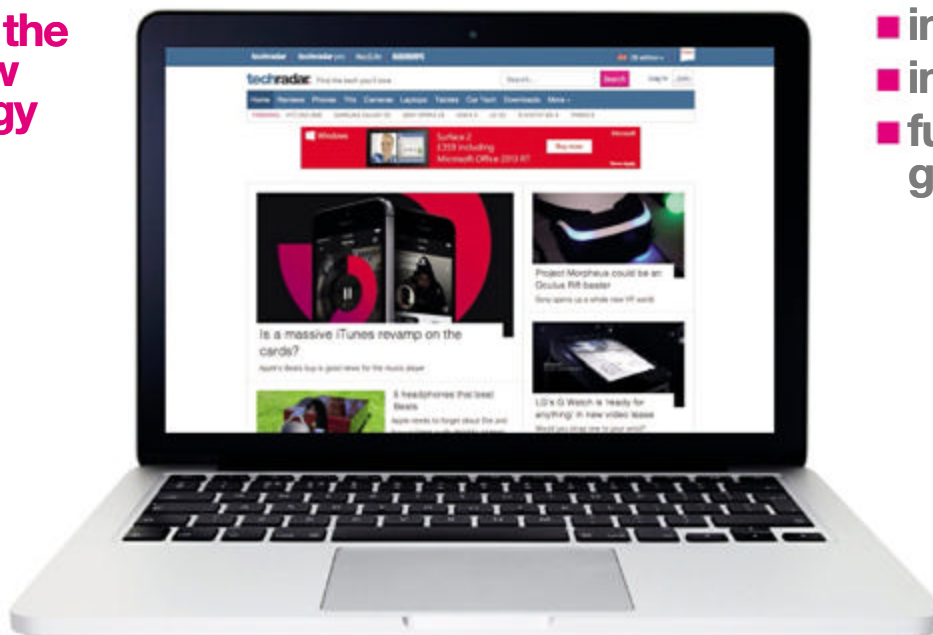
Automate the otherwise tedious task of backing up your WordPress blog using BackWPup.



Introducing a global tech brand  
that promises to change the way  
you consume technology

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- in depth
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# MEET THE NEW PHOTOS APP

iPhoto and Aperture are no more - so here's how to get to grips with Apple's new Photos app, made for amateurs and pros alike

**F**

OR THE BETTER part of a decade, iPhoto was arguably the cornerstone of Apple's successful suite of consumer creative iLife products. Many of us have been in the habit of shooting our daily and family adventures, then manually (not to mention hopefully) syncing them to our Macs when we have a free moment.

But times change. We now live in an age of ubiquitous cameras, always-available cloud photo libraries, and one-touch editing. There comes a point in many a trusty caterpillar's life to evolve into a beautiful, graceful butterfly - while others, of course, are swooped on and eaten by a passing bird. Guess which one iPhoto is...

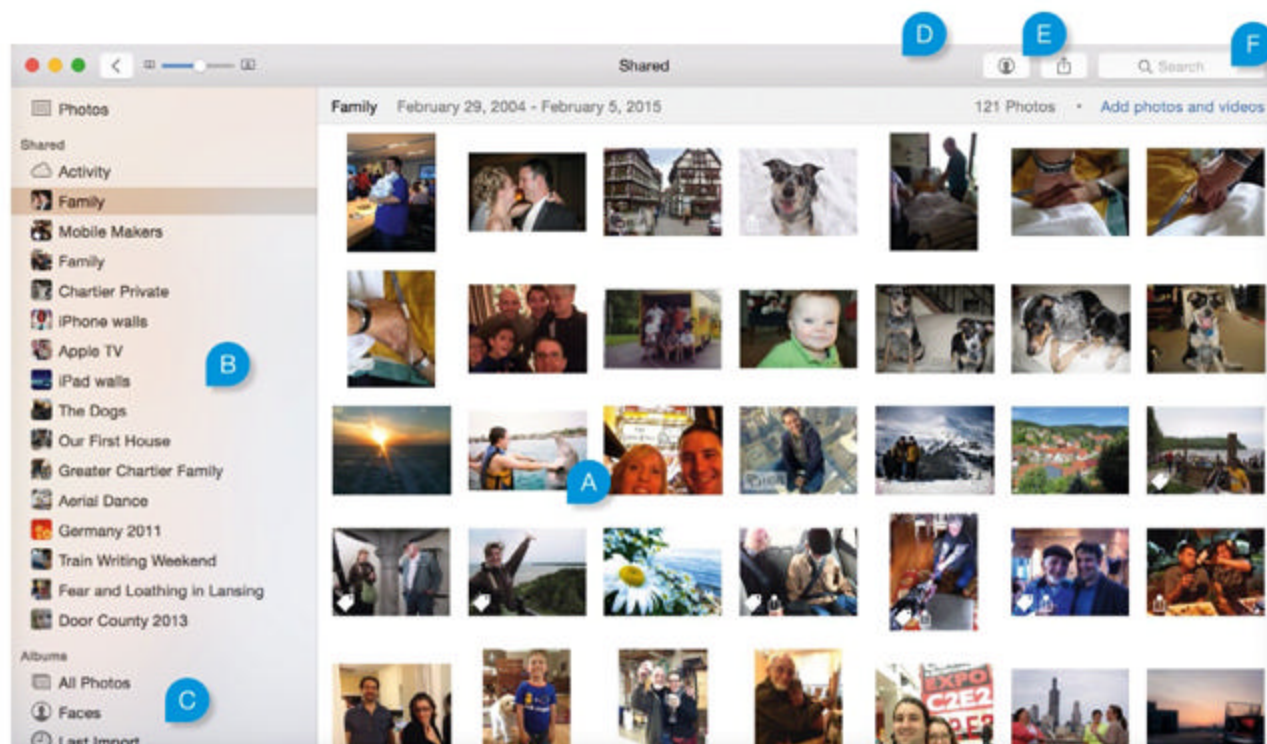
With the meteoric success of iOS, Apple has elected to retire both iPhoto and "iPhoto Pro" (a.k.a. Aperture). It's no secret that iPhoto was getting bulky and slow, and the pro-centric Aperture has been eclipsed by its biggest competitor, Adobe Lightroom. Both products have already been "sunsetting" and will receive no updates going forward.

A successor now rises in their place that is both something old and something new - an all-new Mac edition of the Photos for iOS app with which over 700 million people (and counting) are now quite familiar. If you do need something of a refresher course, though, or if you're new to the Mac altogether, let's check it out.



# The new Photos interface

Find your way around the new app



## Quick look Photos' organization window

### A Main photos area

Here you can see all your photos (and videos!), displayed as a simple grid. If you're using a Trackpad or a Magic Mouse, you can pinch in and out to quickly resize the grid to see larger photos with more detail, or more photos all at once, similar to thumbnail view sizes in Finder.

### B Sidebar

Here is where you can slice and dice your library. In fairly standard Apple practise, new Albums, Smart Albums, and Folders you create are listed here. This also displays any Shared Photo Stream albums you have created or joined from others.

### C Smart sidebar

Photos for Mac does quite a bit of library organization for you, automatically sorting some items into sections such as Faces (Mac-only for now), Favorites, Panoramas, Videos, Slow-Mo, and more. Unlike custom albums you have created yourself, you cannot remove or rename any of these standard application sections.

### D Toolbar

For iPhoto and Aperture users, the Photos for Mac toolbar is dramatically simplified. Only a couple options are visible while you're browsing your photos and albums, and options to share and edit a photo appear only once you select or double-click, respectively.

### E Editing

Click the Edit button at the right of the toolbar to craft a photo into your own image. A suite of tools, which iOS users especially should recognize, appears to the right of your photo as the app switches into an editing interface. This is where the magic happens.

### F Search

What are ever-expanding photo libraries without a way to search through it all? Here you can zero in on just about anything, including metadata (like locations and dates) which is automatically captured when you shoot with an iPhone - as well as album names, Faces, and other information you add.



# Photo organization

Discover the new app's library features

**B**Y DEFAULT, AND just as in iOS, Photos for Mac displays your photos and videos using the basic metadata of time and location (when available). Combine this with the new built-in sidebar categories, and most will be happy with this level of organization.

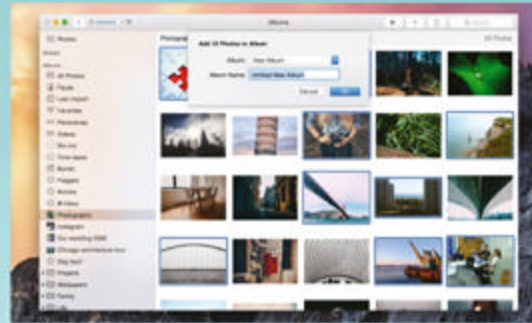
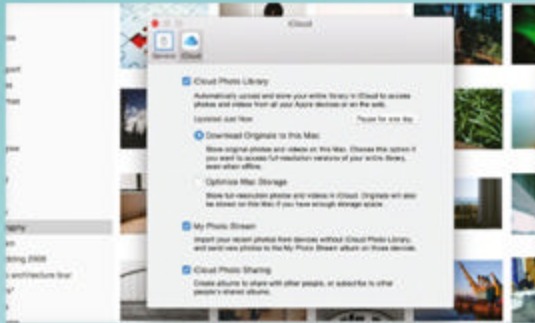
If you're the more adventurous type, you can create albums to organize media for just about any purpose or topic you want. And if *that* isn't enough, you can also use Smart Albums – a longtime staple of iPhoto, Aperture, and OS X itself – to automatically filter your library by criteria like date, text in added titles, and even the camera used.

Of course, the fabric tying all Apple products together is iCloud, and it is a first-class citizen here with a custom feature

name: iCloud Photo Library. If you enable this, your entire library will automatically sync between all devices as long as they're on Wi-Fi. Yes, even edits you make to photos will sync, as will your ability to revert the photo to its original.

If there's any beef with Photos' organizational abilities, it's that not all of them sync with iOS. You can create Smart Albums and organize Faces on Mac, but Apple's latest iOS as of this writing will simply not see them. Our ever-expanding photo libraries sync to all devices now, but the smart tools we need sift through them do not. Oh, and out-of-the-box, Photos is woefully short on filters. We hope Apple allows third-party apps to add filter tools on Mac, just as they can on iOS.





## ? NAME YOUR FACES

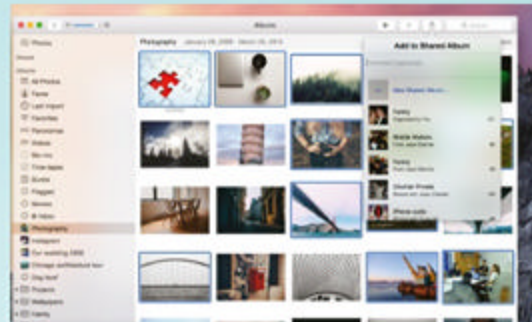
Name people in your photos to make them easier to find later. Double click a photo, click Window > Info, and use the Faces tool there.

## 1 Import your photos

If, like most people, you shoot everything with your iPhone, be sure to enable iCloud Photo library on all your devices for effortless sync. To manually import from a traditional camera, simply plug it in via USB to trigger Photos for Mac's import tool.

## 2 Create an album

Use File > New Album to create a blank album in your sidebar, give it a name, and start dragging photos into it. Alternatively, hold  $\text{⌘}$  or  $\text{⌘} + \text{⌘}$  to select multiple photos, then click File > New Album. All selected items will be automatically organized into that new album.

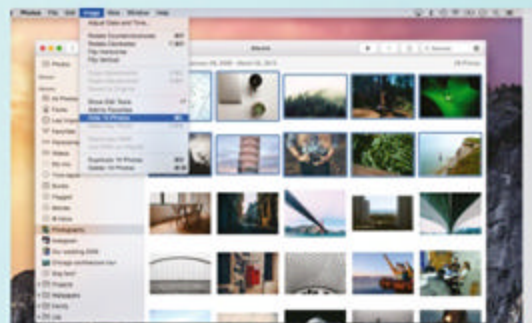


## 3 Get smart

If you really want to start organizing, use File > New Smart Album to create a live, dynamic filter of your library. For example, you could combine criteria like "date" and "Face" to find all photos of yourself from *that one time* and delete them to leave no evidence...

## 4 New Shared Album

A great feature of Apple's new photo ecosystem is the option to share and even collaborate on an album with friends and family. Use File > Share > iCloud Photo Sharing to share media with people you invite (Apple devices required). You can even let others upload.



## 5 Manage info and keywords

You can add titles, descriptions, and keywords to photos to make them easier to organize and search for later. For example, if you take a boat ride on one of your regular family trips, a "boat ride" keyword will make it easier to find that trip later.

## 6 Hide photos

If you save images such as screenshots on your iPhone, but don't want them cluttering your photography, Photos for Mac (and iOS) can hide them (Image > Hide Photo). If you put them in albums, the photo will display in that album, but not in All Photos.

## ? GONE, BUT NOT DELETED

Deleted photos are truly deleted after 30 days. But if you need to recover some, use File > Show Recently Deleted.





## Easy edits

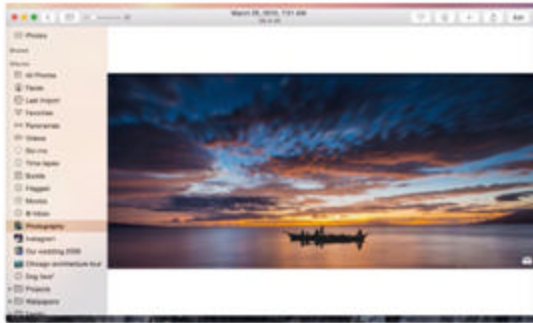
Photos' quick-fix tools

**P** **HOTOS FOR MAC** provides a succinct set of editing tools to help most typical users polish their memories. iOS users should feel right at home with the handful of options – Enhance, Rotate, Crop, Filters, Adjust, Retouch, and Red-eye – but iPhoto and Aperture users shouldn't have any trouble picking them up.

As in iPhoto, Aperture, and Photos for iOS, edits are non-destructive, and they even sync if you use iCloud Photo Library. Crop a photo in Photos for Mac and add a filter for that extra style, and later you can revert to the original from your iPhone or iPad. Yep, we live in the future.

As mentioned earlier, the Edit button won't appear in the upper right until it is needed (the idea is that users don't need to see certain tools until they are in the right mode or it is necessary). But once you are editing, the entire interface shifts to accommodate. The sidebar disappears, the light, Yosemite-standard background turns to black, and the edit tools appear on the right; it's pretty difficult to miss that you have left "organization mode" are now in a different task.

Let's give some basic edits a try with a photo from Unsplash.com, a great photography project that regularly publishes beautiful photos which are free to use.



## ? RED-EYE REDUCTION

The Red-eye tool is a simple way to de-possess the subjects of your photos. Just resize the brush to fit over your subject's eye, then point and click.

## 1 Time to edit

To enter edit mode, find a photo in your library or download one from Unsplash.com and drag it in (remember, all edits are non-destructive, so feel free to play around). Double-click the photo to view it individually, then click Edit at the right of the toolbar.

## 2 One-click fix

If your photo needs a quick boost, use the first tool, Enhance. It has no options or customization, but it will assess your photo for things like white balance and color balance, then automatically tune it for sharing or posterity.

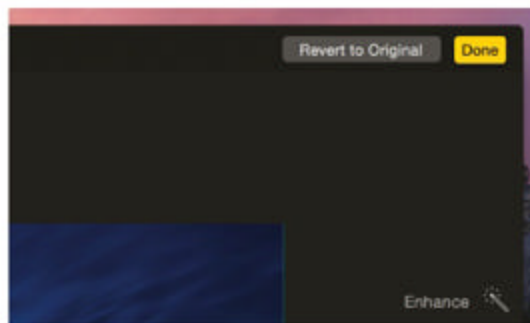
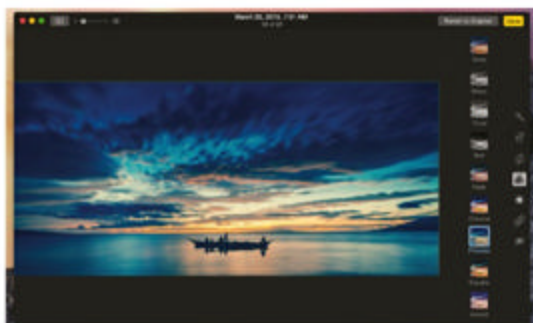


## 3 Right-side up

Sometimes a photo falls on its side, or your iPhone's rotation lock might have caused it to appear upside down. Use the Rotate tool to turn it the right way. Bonus sub-tip: hold the  $\square$  key to switch the direction of the rotation.

## 4 Crop for focus

Editing tools should appear on the right. Let's focus on a good part of the photo by clicking the Crop tool. Now click and drag the handles that appeared around your photo to move the most prominent person or object to the center, for instance.



## 5 Add some style

Move back over to the toolset on the right and click Filters. Apple includes a handful, so you could try "Process" to add a dreamy state, or "Noir" for some mystery. When you're happy, click Done in the upper right to keep your new masterpiece.

## 6 Throw it all away

But what if you didn't just create a masterpiece? No problem! Double-click the photo again to view it individually, then click the Edit button. See "Revert to Original" right next to Done? There's your ticket back to square one.

## ? UNDO ADJUSTMENTS

While making adjustments, you don't have to revert and start all over. Your trusty  $\square$  +  $\square$  will undo, one adjustment at a time.



# Advanced improvements

Get to grips with Photos' more powerful tools

D

**ESPIE ITS FOCUS** on the everyday customer with Photos for Mac, Apple has packed in a number of advanced photo-editing tools that are easy to access if you want them, yet effortlessly avoidable if they just aren't for you. They surely aren't an end-all replacement for serious Aperture users or professionals, but they may be just what you need when it's time to move beyond a crop and a filter.

In true Apple fashion, diving into Photos for Mac's more advanced editing tools feels deceptively simple. These tools live alongside the others we just tinkered with,

at times adding an advanced feature to a core tool (like fine-grained rotating/leveling in Crop), and sometimes being collected in their own section like Adjust.

As you might expect, these tools can all stack or combine their effects as you work (and yes, everything is still non-destructive if you have to start over, whether you decide right now or a year down the road). For example, if a photo's colors are all over the map, you can first crop it, then use a White Balance adjustment on the cropped area to better center its palette, then use a filter to add style, again on just the cropped portion.

Let's roll up our sleeves and dig a little.

## ? YOUR WORKSPACE

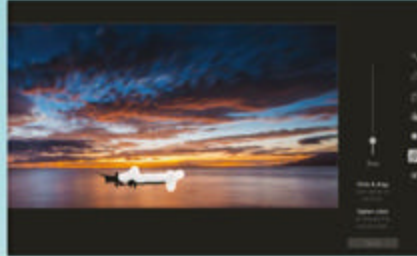
You cannot reorder adjustment panels (at least, not yet), but Photos for Mac will preserve your additional panels between photos and sessions.





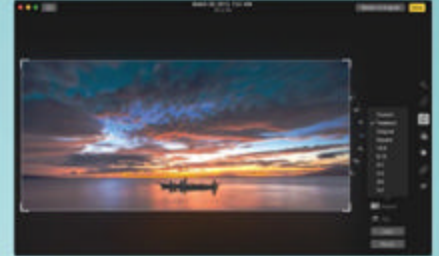
### 1 Rotate to a degree

You may have noticed a degree meter appeared with the Crop tool, just to the right of your photo. Click and drag this to level your photo with fine control; this is great if you were off-balance when shooting or if you want to add some drama.



### 2 Retouch

Arguably one of the most “magical” tools, Retouch is a surprisingly accurate way to make many unwanted elements disappear. This is great for restoring aged, cracked family photos to glory, or even, as here, removing the boat and passengers.



### 3 Crop to a standard

If you often crop photos for a specific use or format – say, 5 x 7 inches for print or 16:9 for featured blog post images – look to the bottom of the Crop tool. Click the Aspect button for a bunch of size presets, or define your own dimensions.



### 4 Split view

If you're on an editing roll, use View > Show Split View to show a left sidebar of all photos in the currently selected album. This gives you a bird's-eye view of the other photos you can edit, and it's just one click to switch while staying in edit mode.



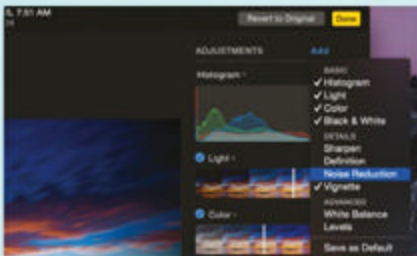
### 5 Adjust

This is where you can take complete, manual control over enhancing your photos. Sliders offer fine-grained control over everything from color saturation to highlights and shadows, complete with clever thumbnail previews.



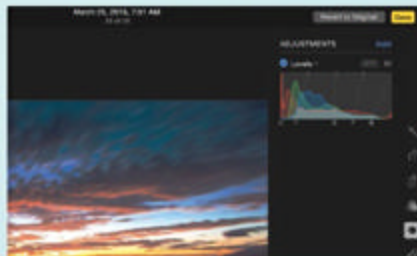
### 6 Paste adjustments

If you're editing a similar group of photos and you get adjustments on one just the way you like, you can copy and paste it to all the others. Simply use Image > Copy Adjustments on the current photo, then Image > Paste Adjustments on the others.



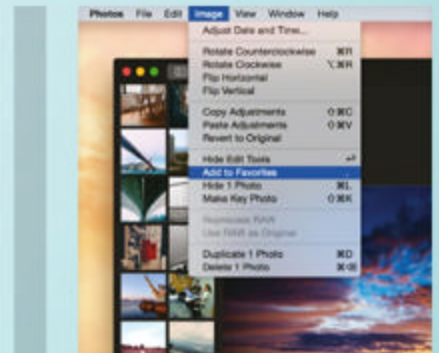
### 7 Adjust adjustments

You can add a broad array of tools to the default set. Click the Add button at the top of the Adjustments column – everything from a histogram, to noise reduction (for grainy photos), and even a Photoshop-ish levels panel.



### 8 Levels

The Levels tool is like going under the hood of the Light and Color adjustments. Levels allows you to adjust color and tone by hand, and to fix “flat” images by setting new black and white points, as well as the mid-points.



### ADD TO FAVORITES

Use Image > Add to Favorites on Mac to sync your favorite photos with iOS.



# APP LIFE

THIS MONTH'S MOST INTERESTING IPHONE & IPAD APPS

## Forge by Adonit

A new kind of crucible for your ideas

**Free** (IAP for unlimited projects) **Developer** Adonit Corp, adonit.net

**Platform** Universal **Requirements** iOS 8 or later

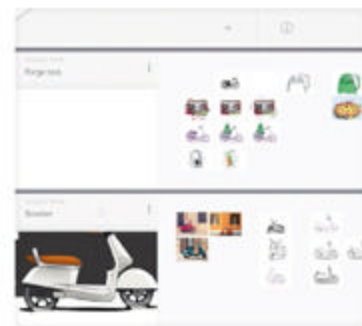


You may have heard of Adonit in conjunction with touchscreen art. Its family of styluses has grown to include the Pro, the Script, the Touch, the Pixelpoint and the Adobe Ink and Slide. Now, with Forge, Adonit has decided to step into the app side of things, with its own spin on a creative application.

It's probably worth beginning with just what Forge is (and isn't). It doesn't mimic realistic media (like ArtRage, Procreate or Art Studio) nor is it a technical app (Scribbl, Inkscape, Adobe Ideas) or sketchpad replacement (Paper, Flipink, Moleskine). Instead, Forge goes down a

different path, designed around helping you develop ideas and projects. Your drawings (and other stored inspiration images) are arranged in blocks, with an in-app purchase removing the limit on how many you can have. It's for taking down ideas, iterating and noting related things in a way that's easy to browse, rearrange and follow your progress. In a nice touch, each picture can be swiftly copied from one working document to another for continued editing. The workspace will seem very familiar if you've used Adobe Sketch – the majority of the interface is pretty similar. There are different drawing tools at the top, as well as a layers menu, and a big canvas for drawing underneath.

Using a Bluetooth stylus with the app can be both beautifully smooth and unexpectedly obtuse. Adonit's own Touch v4 and Pixelpoint styluses work perfectly, as do the Script and Ink. However the Script has no pressure sensitivity and the Ink only gives this perk on an iPad 4 and above. Competing styluses by 53,



Forge by Adonit acts as a curator so you can lay out projects and inspirations...

Wacom, Pogo and so on are, unsurprisingly, unsupported.

Caveats aside, Forge is a solid app. The tools are fairly generic, but they have a pleasing effect on the screen, and its other features are all useful. After an hour of drawing, we did experience some infrequent slowdown using the app, though.

Forge is a very usable creative app, and it pairs well with Adonit's styluses for committed iPad artists, but if you've used a range of creative art applications, don't expect to see much new.

**THE BOTTOM LINE.** Adonit's first image-editing app has much to like and much to improve. **PAUL KERCAL**

### FORGE BY ADONIT

- ▶ Easy movement of images from page to page
- ▶ A clear set of image editing tools
- ▶ Some awkward UI
- ▶ You need a stylus to get the most from it

**GOOD** ■■■■■

The art element works well with the right stylus.



# Earth Primer

Create, transform and destroy the world

**\$9.99 Developer** Chaim Gingold, earthprimer.com

**Platform** iPad **Requirements** iOS 7 or later



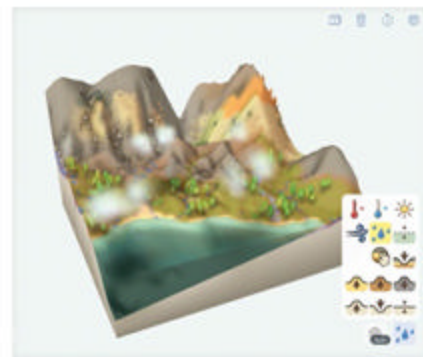
Kids these days don't know how good they've got it. Not long ago, while a science book might have been full of wonder, it was still a dusty tome. Earth Primer puts the forces of nature rather more overtly at your fingertips as you build volcanoes, create sand dunes and rockfalls, raise rivers and freeze everything solid.

All the while, the book is sneakily teaching you stuff. If you're a kid, you may not even notice the information soaking into your brain as Earth Primer urges you to create magma or melt a glacier you've just formed. But it's clever like that, even "locking" subsequent

chapters until you've worked through all of what the current one wants you to see.

In a sense, Earth Primer's heart feels a little like a game, and its playful nature should come as no surprise when you learn that author Chaim Gingold is best known for the fantastic Spore Creature Creator.

The masterstroke is the Sandbox, where you get a little hunk of land and can do whatever you want with it – but each god-like tool is only available if you've already learned about it. So if you want to bake the land, cause a flood or blow gales around your mountaintop, you'd best knuckle down for some reading and a touch of finger gymnastics.



Playing with the forces of nature is both educational and a whole heap of fun!

Whether learning or playing, this is a beautifully designed and engaging educational app for children of all ages – and we'll happily count the MacLife team among them!

**THE BOTTOM LINE.** One of the best and most fun iPad books out there. Imaginative, creative and essential. **CRAIG GRANNELL**

**AWESOME** ■■■■■

## Myne – advanced search for Twitter

**Free (with IAP) Developer** MobileLife Studio, saviapps.com

**Platform** iPhone, iPod touch **Requirements** iOS 7 or later



We're not denying that Twitter's default search is a pretty blunt instrument, but Myne takes precision to the extreme.

Here, you can filter tweets by whether or not they contain images, have been favorited a certain number of times, come from somebody you've never followed, and so on. You can also search, apply filters to these results, and then save the searches for later use. We initially found this unwieldy – it takes practise to yield exactly what you're looking for. We also found the "trends"

feature quite clumsy; despite offering up impressive precision (down to individual cities), all it seemed to offer us was "nothing found." In all, it might be a useful tool for social media managers (though if you want to add more than one account, you'll have to pay), but it's not intuitive enough for casual users.

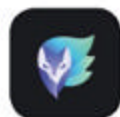
**THE BOTTOM LINE.** Myne takes Twitter control to a truly granular level, but stumbles in a few places. And the level of detail may be too much for most users. **EMMA DAVIES**

**SOLID** ■■■■

## Enlight

**\$7.99 Developer** Lightricks Ltd, enlightapp.com

**Platform** iPhone, iPod touch **Requirements** iOS 8.1 or later



Getting a little bored of Instagram's Mayfair feature?

We don't blame you. How about the ability to add gradients, effects and contouring to your shots instead? That's what Enlight offers. As well as a decent selection of preset filters (all of which you can control the intensity of), there are brushes, frames and effects such as Sketchify that you manually apply to your images, using a finger to "paint in" the areas of effect. There's plenty of scope for the tweaking and layering of effects, and doing

so is tactile and enjoyable – although it's more time-consuming than the simple "snap, filter, share" many of us are now used to. It might take a while to achieve your desired look at first – especially if you're a perfectionist – but when you get there, there's a sense of satisfaction that Instagram's easy wins will never give you.

**THE BOTTOM LINE.** Enlight offers a wealth of processing effects for photos, giving you full control of your images.

**EMMA DAVIES**

**GREAT** ■■■■





Every area is small, but exploration is slow and key items don't always pop up.

Ah, jeez, you've got red stuff all over your nicest shirt...



# Criminel

The camera never lies. Murderers, however...

**\$1.99** Developer 4PM, [criminelgame.com](http://criminelgame.com)

**Platform** iPad **Requirements** iOS 7 or later



Paris, 1890: a festering, black and white hive of crime, conspiracy and corruption. Only the strongest of detectives, in mind and stomach, stands any chance of sifting through the human detritus to solve its many cases. And you... are not that detective. You're just the guy who takes crime scene photos for him, mostly while

envious of how much more interesting his job looks.

Puzzle/adventure game Criminel instantly impresses with its aesthetics, with its haunting effects and sounds, with the cinematic way it presents both the crime scenes themselves and the twisting metaphorical corridors that link them into both a nightmarish dreamscape and coherent noir arc. It uses the iPad's power well, creating good-looking 3D locations to explore in search of clues and overlaying grunge effects to boost the atmosphere.

The limits of the game itself, though, are another matter. Each crime scene is just a case of very slowly walking around and facing the right angle so the parts you're supposed to photograph light up, until your boss Max – the actual detective – magically decides that everything's found.

At that point he explains just about everything, you check off a few obvious references on a witness statement, and finally accuse a suspect. Case closed!

Each location is completely static, with no ability to, say, open drawers and hunt for evidence. Only in the fifth and final case do you get to feel like more than a tag-along character, and that's a short burst of relevance at the end of a similarly brief adventure. The whole thing is barely more than an hour long, which isn't helped by the fact that picking the wrong perp just lets you try again. There's no arguing Criminel's style, but the raw procedure of its police procedural just isn't deep enough to allow for the investigations it deserves.

**THE BOTTOM LINE.** Less a case of murder than of style over substance. **RICHARD COBBETT**

## CRIMINEL

- Excellent style
- Creepy atmosphere
- Shallow investigation
- It's all over in a camera flash

**WEAK** ■■■■





# Blockwick 2

It's just a jump to the left, and then a slide to the riiiiight

**\$2.99 Developer** Kieffer Bros, kiefferbros.com

**Platform** Universal **Requirements** iOS 6 or later



The best way to play Blockwick 2 is when doing something else. This might sound like an insult, but it's not meant to be.

Apart from adventure games or anything with a deeply involving narrative, a lot of mobile puzzle gaming happens against a backdrop of TV, conversation or travel. So Blockwick 2's seamless slip into that role is no bad thing at all.

Each level tasks you with connecting sets of colored blocks of varying sizes – just blue at first, but later increasing numbers of colors come into the mix. White blocks are moveable obstacles, but there are also snags in the shapes of the playing fields

themselves. As you progress, things get more complex – some blocks are pinned into place, others are paired and so can only be moved in tandem.

Sometimes, it feels trying to tie a knot in a cherry stem using only your elbows. There's no time limit, but you'll certainly make friends with the restart button when you realize you've blocked yourself into a corner. Thankfully, if you've found the hidden pearl in a level, you can choose to skip to the next if you're stuck – it's a relief, but one you do feel like you've worked at least a little for.

And your brain is great at working on puzzles in the background while you're not



The blocks, the blocks... they are invading my brain! Don't let it get to you.

paying them full attention. So really, if you want even those skipped blocks to snap right into place, the best thing to do is to play as you multitask. See? We said it wasn't meant as an insult.

**THE BOTTOM LINE.** It may resemble the digital equivalent of a child's sliding puzzle, but this is a sleek, engaging brain teaser that will slot straight into your day-to-day gaming. **EMMA DAVIES**

**GREAT** ■■■■■

# Plastiland

The joy of destroying Plasticine without the mess

**\$2.99 Developer** Zillion Whales, zillionwhales.com

**Platform** Universal **Requirements** iOS 7 or later



If you ever played '90s videogame classic Lemmings, you'll have a rough idea of what to expect from this environmental puzzler: each level has an entrance, an exit and a set of hazards you need to guide a certain number of bounce-rolling "plastiballs" past. Each of these blobs can be transformed into one of eight different states – in which they can climb up vertical surfaces, act as bridges between platforms, chew through scenery, and so on – but they're vulnerable and a tad doopy in their default state.

What gives Plastiland a twist is that all of the game's character models and levels

were created in real life from Plasticine (or Play-Doh, or whatever your modeling clay of choice is...). The result is a distinctive, stop-motion look, which is a good selling point, but we're not sure it's quite enough in itself to make the game stand out.

There's no countdown timer, so levels end either when you've completed your objective or – often – lost all your plastiballs to minor catastrophes. When you crack a creative solution to an especially tricky level, you get the glee of having made something satisfyingly Rube Goldberg-like, but otherwise progress can be plodding. It's certainly child-friendly in that it's brightly colored, violence-free and encourages



The puzzles might be simple in spots, but style and color of the levels is great.

creative thinking in the face of obstacles, but some of these puzzles might be a little tricky for younger players. For adults, though, it's likely to be too pedestrian to offer much enjoyment.

**THE BOTTOM LINE.** The problem-solving here might teach kids patience and lateral thinking, but won't engage adult gamers. **EMMA DAVIES**

**SOLID** ■■■■■



Despite its setting, *Starships* isn't on the same scale as *Civilization*.

# Sid Meier's Starships

Boldly going... but not quite far enough

**\$14.99** Developer ZK, 2kgames.com

**Platform** iPad **Requirements** iOS 7 or later



Deep down, we all just want to build our own galactic federation of planets, don't we? *Starships* promises to let you do just that. It comes across as *Civilization* (also by Sid Meier) among the stars, but this expectation is in many ways also its pitfall...

Really, it's a strategy-light game that rather awkwardly

mixes the simplified *Civilization* Revolution games for iOS with *XCOM*'s squad combat. The result is a scrappy little creation that's not bad at all – but it also could have been so much more.

You are one of several nascent civilizations in the galaxy in each game, and you win by becoming either the largest or the most advanced. You gain resources by expanding your federation to include new planets and colonies, which you then develop to produce *more* resources, or to increase their population. You win over unclaimed planets by gaining influence on them – which means helping them in combat missions, spending time there with your fleet, or... buying them off.

Sadly, while this might suggest interesting inter-federation politicking to win over competitors' planets, it's

really just a throwaway system. Influence only counts on unclaimed planets, so the early game is a rush to grab as many as possible. After that, if you want more, you'll pretty much have to invade. It sorely lacks in good peaceful/trading play, or more underhanded tactics. Instead it's just fight or... hang around.

Fortunately, combat is the best part of *Starships*. When you get into a fight or mission, you command a fleet of ships – usually your own, which you build and upgrade over time – on a small-scale map. Ships can specialize in different areas, and great ideas such as shields that only work at the front mix with tools like cloaking to offer the potential for some supremely satisfying tactical play. That said, the AI is not smart, so it can be just a basic laser-fest later.

For a pick-up-and-play game, *Starships* works well enough on iOS (even with some touch control issues – accidental taps while trying to zoom in are common), but depth is lacking, and those who want true *Civilization*-style strategy in space will be disappointed.

**THE BOTTOM LINE.** Too light in too many places, but still offers fun tactical action when it's at its best. **MATT BOLTON**

## SID MEIER'S STARSHIPS

- Easy to play in bursts
- Fun space battling
- Very light on strategy outside of combat
- AI not that smart

**GOOD** ■■■■■



# Pixel Heroes: Byte & Magic

Their snark is worse than their byte

**\$6.99 Developer** Headup Games, headupgames.com

**Platform** Universal **Requirements** iOS 4.3 or later



Gamers on the move may have swapped their Game Boys for iPhones over the years, but a love for pixelated heroes and irritating yet lovable chiptune music endures.

This is the retro niche that Pixel Heroes fills with pride. It's sweet, fun and very tongue-in-cheek, as your three chosen heroes venture across the plains, through dungeons and back home in time for tea. The heroes are generated at the start of a new game, with stats such as Life and Strength that determine their usefulness in areas like attacking and healing. They all come with randomly generated names, too, which works to

make you become fond of them all too quickly.

You'll load up with potions, weapons and spell books and go on the road, where strange events will test your logic and aggression – will you fight the strange half-men or offer to take their ring to the lava pit? Will you follow the dog, or feed it instead? Choose wisely – you'll often end up having to fight *something*.

Once you get to the dungeon, you have to make your way through seven rooms, and the boss fight. Each room is either a battle or a test of skills, with the former requiring strength and a tactical approach, and the latter requiring high stats and luck. Both generate loot, which can be



used to supply your heroes with better equipment. It's an endlessly turning wheel – fight, get loot, use loot, repeat.

If you've played Pokémon, or any turn-based fighting/strategy game, you'll get it pretty quickly, but a fairly high proportion of the outcome is based on luck, and often it'll be the bad kind. Given that the game begins at "hard" and only gets tougher in the two successive unlockable modes, you'll have to play for some time to get the hang of it. Fail, and your team dies, appearing as a permanent record of your failure in a graveyard.

In between your standard (but enjoyable) battle stuff, the game treats you to jokes, dumb quests and silly references. It knows you know classic games, and it rewards you for it by being a pleasantly satisfying little game as well as a pretty good parody.

**THE BOTTOM LINE.** Pixel Heroes is a fun, nostalgic yet tough strategy game that will have you bonding with pixels like the old days. **KATE GRAY**

## PIXEL HEROES: BYTE & MAGIC

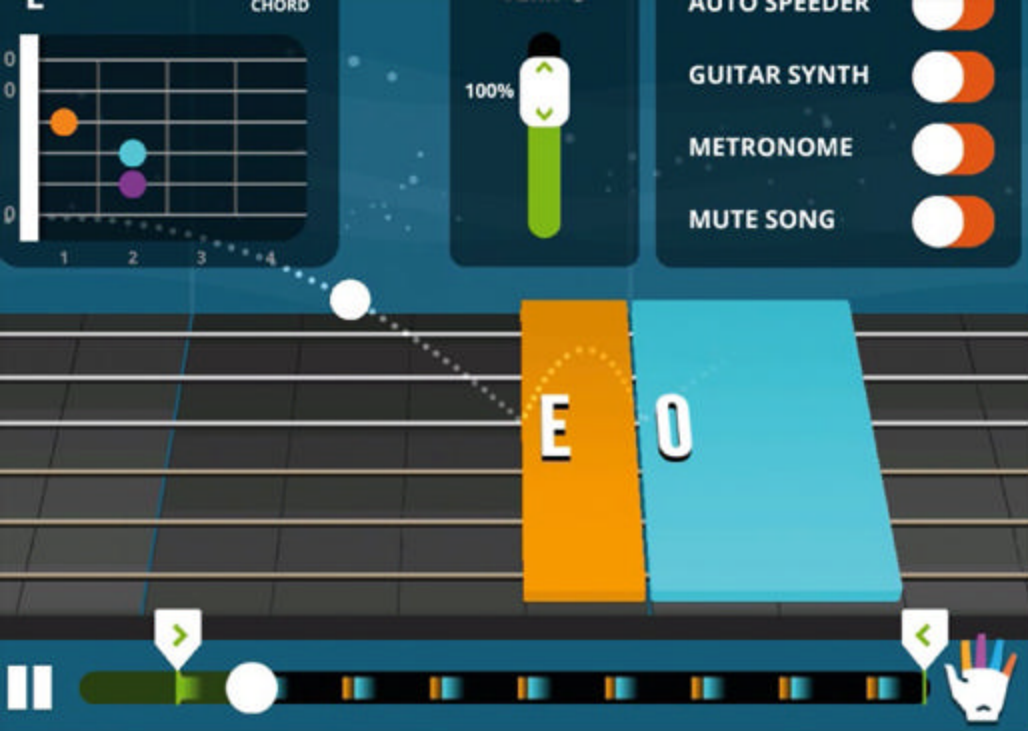
- ▶ Excellent jokes and fun references
- ▶ Engrossing, in-depth strategy system
- ▶ Tense, tricky battles against a range of foes
- ▶ So tough your fingers will bleed

**GREAT** ■■■■■

Got stuck somewhere? Think about the loot you've accrued and use it wisely...







It's easy to follow what you need to be doing on screen but the app's timing recognition is questionable...

# Yousician

Yousician wants to teach you how to play guitar

**Free (Limited); \$19.99/month or \$119.99/year (Unlimited)**

**Developer** Yousician Ltd, [get.yousician.com](http://get.yousician.com)

**Platform** Universal **Requirements** iOS 6 or later



Yousician aims to take you from complete novice to confident guitar player using your own guitar and your iOS device.

That's the first thing to note here – we are talking learning from the ground up; so it's basic melodies and chords, not how to master complicated Hendrix

flurries or Clapton solos. You play along using your own guitar, and the Yousician app uses your iPad's built-in microphone to determine if you're hitting the right notes at the right time. Notes scroll past on a notation tab, so you can see them coming in good time as the music plays. You get instant feedback on whether you were "late," "great" or "perfect." Score high enough and the next part of the song is unlocked. It's a bit like playing a game, the by-product of which is that you're learning to play guitar at the same time.

Before each mission there's usually some video instructions on how to play, which introduces the playing technique you're about to use. Unfortunately, the songs you jam along to are strange royalty-free tributes. So, instead of *Whiter Shade of Pale* by

Procol Harum, you get *White Shades*, which has a similar melody and meandering organ riff, and instead of *Paradise City* by Guns N' Roses you get to rock out to *Robot City*, which is similar, but has way more synth than the original.

It's easy to ignore these shortcomings, though, because the point is to get complete beginners to learn guitar, and viewed through that narrow lens the app does well. What's harder to ignore is that for an app that's all about being in time, it's judgement on whether you are in time or not is questionable. Often it feels like you have to play a fraction early to gain a "perfect." This doesn't usually stop you progressing through the game, but it can be maddening, especially if you're a bit on the perfectionist side.

Then there's the question of price. You only get about 10 minutes' playing time a day for free. If you want more, you'll have to pay around \$10 a month. Compared to a music lesson, it's very cheap, but on the App Store, that's a king's ransom.

**THE BOTTOM LINE.** Great app for beginners, but experienced players should probably steer clear. **GRAHAM BARLOW**

## YOUSICIAN

- A fresh approach to learning the guitar
- Motivates you to keep learning
- Timing is that little bit... off
- Too basic for experienced players

**GOOD** ■■■■■



## ROUNDUP

# The 6 best apps for kids this summer

Educate and entertain little ones with your iPhone and iPad

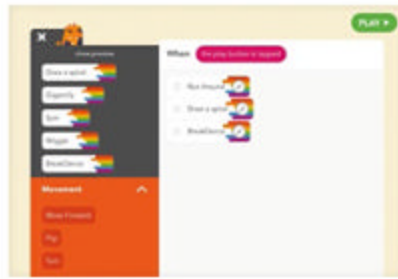
BY MICHAEL SIMON

When you're a kid, summer takes on a whole new meaning. It's not just the warm weather and late sunsets – it means no school for three months. But all that quality time can be rough on us parents. And when it's raining or we're cooped up together on a long car ride, we can't count on sandcastles, fireflies and tree houses to entertain them. But your iPhone or iPad can help.

Little ones love to watch videos, so the YouTube app can be a bit hit. But **YOUTUBE KIDS** (Free, Universal) takes it to the next level. With an array of short films, episodes and clips geared specifically for young eyes, it means we don't have to worry about them accidentally clicking on something a bit too mature.



Even if you haven't traveled far, the kids can escape and explore with Barefoot World Atlas.



If your kids like playing apps, they might like creating them too... Hopscotch makes it easy.

Just because it's summertime doesn't mean your kids' brains need to turn to mush. With a stunning 3D illustrated interface that transports your kids around the world, **BAREFOOT WORLD ATLAS** (\$4.99, Universal) will make sure they're learning a little something. With hundreds of places to visit, your kids will get lost for hours as they travel all around the globe.

It's never too early to learn to code, and **HOPSCOTCH** (Free, Universal) makes it fun and easy to get your kids started on the path to developing the next Facebook. With a drag-and-drop interface that takes the difficulty out of sequencing, abstraction and conditionals, the app will give your kids all the tools they need to start making their own awesome games and apps.

If you want your budding entrepreneurs to start learning how to spend and save all that money they're going to make, **DINORAMA** (\$2.99, Universal) will teach them the value of a dollar. It's not just about cute carnivores – your kids will build and operate their own Jurassic Parks while learning actual business principles such as interest, supply

and demand, and inflation. And the best part – there's no in-app purchases, so they can't spend any actual money.

When you want to squeeze some actual math into your kids' free time without them knowing it, look no further than the **MONTESSORI GEOMETRY** app (\$3.99, Universal). With an array of games, activities and interactive characters, they won't even realize they're actually getting taught about pentagons, hexagons and dodecahedrons. And it's designed by teachers, so you can be sure that what they're learning will actually stick.

And finally, sometimes you just need some good, old-fashioned quiet time, and the **THE LEGO MOVIE VIDEO GAME** (\$4.99, Universal) will usually provide you with as much as you need. With nearly 100 characters from the film, 45 brick-smashing levels and mesmerizing graphics, your little ones will get lost for hours while you reflect on just how truly awesome everything is – at least until you have to recharge your iPhone's battery.



We liked Emmet before it was cool – and your kids will love the Lego Movie Video Game.



# REVIEWS

TOUGH TESTING, TRUSTED RATINGS

## 13-inch MacBook Pro with Retina display

The Force Touch is strong with this one

**\$1,299 (128GB); \$1,499 (256GB); \$1,799 (512GB)** **Manufacturer** Apple, [apple.com](http://apple.com)

**Key features** 2.7GHz Intel Core i5, 8GB memory, Intel Iris Graphics 6100

Apple has received a lot of criticism over the years for describing its products as “magical”, or some variant of it, and it probably is fair to say that we should be impressed by very smart technological advances for what they are – ingenious constructions – rather than feeling the need to couch them in terms of mysticism or suggesting that the impossible has been achieved (when what has been achieved was, evidently, possible).

The only problem is that Apple, more than any other company, tends to leave you poking at one of its latest devices, shaking your head and muttering, “Witchcraft” under your breath. Which is exactly what happens with the Force Touch trackpad in the new 13-inch Retina MacBook Pro.

Now, some might say that a new trackpad isn’t much of an upgrade for a laptop. The new 13-inch Retina Pro also has an updated processor to boast of, along with improved graphics. That’s it for changes – but that’s all it needs. It was already one of Apple’s best machines, offering more than enough speed for most people along with a Retina screen for a good price.

The new processor is still an Intel dual-core CPU, but is from its newest generation of chips, which consume less power. It runs at 2.7GHz in the entry-level machine we have here, which is a small bump from the 2.6GHz it was in previous equivalent model. The graphics chip is an integrated Intel Iris GPU, again just like the previous model, though here we were expecting more improvement – Intel is still aiming to make big strides in this area.

We’ll come to what kind of performance improvements those bring later, but the Force Touch trackpad is the thing you’ll play with most at first, because it’s a fascinating thing. Old trackpads have a hinge at the back, and when you click the trackpad, you push down on the hinge. The pad physically moves. On the new trackpad, it doesn’t move – yet it feels as if it clicks beneath your fingers. There’s a small electromagnetic motor inside, and when it detects the pressure of your



Tough testing, trusted ratings

For detailed definitions of every score on Mac|Life's ratings scale, go to [maclife.com/ratings](http://maclife.com/ratings).



With power, connectivity, a gorgeous screen and good battery life, this is a superb all-round notebook.

## HANDBRAKE VIDEO ENCODING TEST

Device	Time
13-inch Retina MacBook Pro (early 2015)	57 minutes
13-inch Retina MacBook Pro (mid 2014)	59 minutes
15-inch Retina MacBook Pro (mid 2014)	31 minutes

To test real-world CPU capability, we re-encode a Blu-ray quality video. Lower numbers are better.

## BATMAN: ARKHAM CITY BENCHMARK 1080P

Device	Frames per second
13-inch Retina MacBook Pro (early 2015)	20 fps
13-inch Retina MacBook Pro (mid 2014)	19 fps
15-inch Retina MacBook Pro (mid 2014)	46 fps

We run the built-in benchmark in Batman: Arkham City at 1920x1080, with settings on High and all bells and whistles on. Higher numbers are better.

## BATTERY LIFE TEST

Device	Time
13-inch Retina MacBook Pro (early 2015)	405 minutes
13-inch Retina MacBook Pro (mid 2014)	308 minutes
15-inch Retina MacBook Pro (mid 2014)	318 minutes

To test battery life, we set the screen brightness to 50% and stream web video until the battery runs out. Higher numbers are better.

## CINEBENCH R15 CPU BENCHMARK

Device	Score
13-inch Retina MacBook Pro (early 2015)	300
13-inch Retina MacBook Pro (mid 2014)	281
15-inch Retina MacBook Pro (mid 2014)	576

Cinebench is an industry-standard processor benchmarking tool. Higher numbers are better.

## BLACKMAGIC DISK SPEED TEST

Device	Read	Write
13-inch Retina MacBook Pro (early 2015)	1308.3 MB/s	615.1 MB/s
13-inch Retina MacBook Pro (mid 2014)	731.4 MB/s	316.2 MB/s
15-inch Retina MacBook Pro (mid 2014)	733 MB/s	711.7 MB/s

We use Blackmagic's Disk Speed Test tool to check SSD read and write speeds in megabytes per second. Higher numbers are better.



It's a kind of magic...  
Apple's new Force Touch  
trackpad works beautifully.

finger, the motor creates a click. It's such a small thing – after all, it just replicates how things used to work – but when you know that feeling of clicking is “fake”, it leaves you smiling. Witchcraft.

While that's all cool, it's not exactly a useful a change in itself. But the Force Touch trackpad adds extra functionality over the old style of trackpad. You've still got multi-touch gestures, but it's also now pressure sensitive, capable of registering presses of different strengths. If you click on something, then keep pressing harder (you can adjust how hard in System Preferences, pleasingly), you get a second click from the trackpad, and something different will happen – replacing the long click of old in some places, such as the Dock. In QuickTime Player, the harder you press, the faster the fast-forward option goes. In Preview, when signing your name, it can detect your drawing pressure. It's another way of interacting, and it's a nice addition, but we do think Apple could have

implemented it better. The main issue is that, though you can make use of it in all sorts of places around OS X, it's not always obvious what it will do. For example, "Force click" (in Apple's parlance) on a file's icon and it opens it in Quick Look, but Force click on the file's name and it makes the name editable. These two things don't share any common factor (such as a keyboard shortcut), yet you can invoke them both by moving the cursor just a few pixels on one file. There's no mental map you can make to predict what the new interaction will do in what situation until you try it and learn it. Hardly the end of the world, but we like obviousness and consistency in interfaces as a rule.

Actually, some of Force Touch's most impressive use is in pure feedback, such as in iMovie. When a clip snaps to a point on the timeline, for example, you get a jolt from the trackpad to indicate that it has snapped. It's a lovely little touch, and we hope many developers will make use of it and the pressure sensitivity.

So what about those few other changes? The processor is indeed a small difference, offering an improvement of less than 10% in our Cinebench



The latest MacBook Pro does boast noticeable and useful improvements.

any noticeable change at all over the old model in our Batman: Arkham City tests. But this means the machine is still capable, if not high-end, when it comes to graphics. At 1280x800, you can play Batman at its High settings comfortably, so most newer games should run fine with the visual fidelity lowered slightly. One advantage of the new graphics, though, is that 4K displays will work at 60Hz with this machine over DisplayPort. Apple isn't officially supporting this at the moment, but it works.

## THE FORCE TOUCH TRACKPAD REGISTERS PRESSES OF DIFFERENT STRENGTHS

benchmarks, and even less in our real-world video encoding tests – only about 3%. Still, its performance is pretty handy for all but the highest-end tasks (thanks in part to a solid 8GB of RAM), and it offers fantastic improvement in a different area: battery life. In our intensive video streaming test, the new machine lasted 6 hours and 45 minutes, hugely surpassing the older version's 5 hours and 8 minutes. The 13-inch MacBook Air still takes home the trophy for battery life, as you'll see on p66, but this is great for the Retina MacBook Pro, since it already offered good longevity under normal use anyway.

Sadly, the new Intel graphics haven't delivered much of a performance improvement – or, really,

And you've still got the fast SSD storage (even if 128GB is rather small for a "pro" machine) – in fact, our review unit offered much better performance in this area than last year's model, though this is likely down to variations between component suppliers. There's also plenty of ports, including two USB 3.0 and two Thunderbolt 2 connections, and, crucially, that Retina display. It's bright, it's clear, it offers vibrant colors and contrast, and it will spoil you for any screen that isn't at least as sharp.

**THE BOTTOM LINE.** Not be a big leap forward for the MacBook Pro but, if you're looking at a Mac laptop now, this offers the best balance of power, features, portability and price – and it comes with that little extra touch of witchcraft. **MATT BOLTON**

### APPLE 13-INCH MACBOOK PRO WITH RETINA DISPLAY

- ▶ Force Touch trackpad is magic
- ▶ Improved performance and battery life
- ▶ 128GB isn't much storage
- ▶ What Force clicks do isn't always clear

**EXCELLENT** ■■■■■



# MacBook Air 11-inch

Apple's cheapest notebook gets a refresh, but does it get any improvements?

**\$899 (128GB); \$1,099 (256GB)** **Manufacturer** Apple, apple.com

**Key features** 1.6GHz Intel Core i5, Intel HD Graphics 6000, 4GB memory

Poor little 11-inch Air. It used to be the cutest, dinkiest little Mac – everyone's favorite. Now that a younger, lither sibling is on the scene in the form of the MacBook, it's facing a bit of an existential crisis. We would say that it's due a reinvention, but that's kind of what the MacBook *is*, so instead it's settling for a processor and graphics upgrade, featuring Intel's latest-generation technology.

The new 1.6GHz Core i5 chip is dual-core, and pretty much the new equivalent of the chip from last year's MacBook Air – it runs slightly faster (the old one was 1.4GHz), and comes with similarly updated graphics unit – but otherwise things in this Air are much as they were, with the exception of the SSD. Apple says that it's now putting the same high-end storage in the MacBook Airs as it does in the MacBook Pros, and if you look at the test results for the 13-inch MacBook Air on the next page, you'll see what a difference that can make. But not in our 11-inch review unit here, the storage was no faster at all. Why? Well, Apple has more than one supplier of flash storage, and the speed of the storage can differ drastically depending on which one you get. The potential variance won't affect most people, but when the difference can be 50%, it's far from ideal.

So, our particular 11-inch Air offered no SSD speed improvement, and no other notable upgrades, either. The new Intel processors are intended to improve battery life, but this model only beat its predecessor in our test by one minute, managing 7hrs 36mins. That's excellent battery life, but considering the big improvements made in the 13-inch Retina MacBook Pro, we were hoping for more. Similarly, there's not much change in the processor and graphics performance: there's improvement, but it's not noticeable – though both it and the 13-inch Air can drive 4K displays at 60Hz now. The 4GB RAM is enough for all lower-level tasks, though choosing to upgrade to 8GB when you buy would be smart future-proofing.

There haven't been any changes on the outside – no Force Touch trackpad here – so you've got the same full-size keyboard, two USB 3.0 ports and a Thunderbolt port. The screen is still 1366x768, and is indicative of this (and its 13-inch partner) as being the cheapest of Apple's line-up. The resolution isn't horrible, but it's not just the Retina crispness that it lacks: it has worse viewing angles, relatively pale, washed-out colors, and less depth and contrast. Compared to screens by other manufacturers, it's not bad, but by Apple's standards, it's this machine's weak link.

**THE BOTTOM LINE.** We don't know if the MacBook will usurp the MacBook Air, but this current model is definitely just holding the line for now. It's a lovely little machine, but this update is nothing to get excited over. **MATT BOLTON**

## MACBOOK AIR 11-INCH

- Still very usable for its size
- Still cheap but high-quality
- Screen just doesn't compare to Retina
- Little improvement over last year

**GREAT** ■■■■■



Tough testing, trusted ratings

The MacBook Air 11-inch has some great features, but most of them were included in its previous incarnation...

#### BATTERY LIFE TEST

Device	Time
11-inch MacBook Air (early 2015)	456 minutes
11-inch MacBook Air (mid 2014)	455 minutes
13-inch MacBook Air (early 2015)	549 minutes

To test battery life, we set the screen brightness to 50% and stream web video until the battery runs out. Higher numbers are better.

#### HANDBRAKE VIDEO ENCODING TEST

Device	Time
11-inch MacBook Air (early 2015)	69 minutes
11-inch MacBook Air (mid 2014)	74 minutes
13-inch MacBook Air (early 2015)	68 minutes

To test real-world CPU capability, we re-encode a Blu-ray quality video. Lower numbers are better.



## BATTERY LIFE TEST

Device	Time
13-inch MacBook Air (early 2015)	549 minutes
13-inch MacBook Air (mid 2014)	565 minutes
13-inch Retina MacBook Pro (early 2015)	405 minutes

To test battery life, we set the screen brightness to 50% and stream a video from the web until the battery runs out. Higher numbers are better.

## BLACKMAGIC DISK SPEED TEST

Device	Read	Write
13-inch MacBook Air (early 2015)	1299.0 MB/s	1136.6MB/s
13-inch MacBook Air (mid 2014)	726.6 MB/s	551.5 MB/s
13-inch Retina MacBook Pro (early 2015)	1308.3 MB/s	615.1 MB/s

We use Blackmagic's Disk Speed Test tool to check disk read and write speeds in megabytes per second. Higher numbers are better.

Again, a refresh for the MacBook Air 13-inch. But we're certainly not talking about a transformation...







### MACBOOK AIR 13-INCH

- Ⓛ Faster storage
- Ⓛ Fantastic battery life
- Ⓛ Non-Retina screen
- Ⓛ Lack of power

**GOOD** ■■■■

# MacBook Air 13-inch

New and improved? Well, in places...

**\$999 (128GB); \$1,199 (256GB)** **Manufacturer** Apple, apple.com

**Key features** 1.6GHz Intel Core i5, Intel HD Graphics 6000, 4GB memory

With Intel's latest chips promising big improvements in battery life rather than performance, and delivering them in the case of the 13-inch Retina MacBook Pro, we had high hopes that the large MacBook Air was about to become an almost inexhaustible work machine. Powerful enough to use for pretty much any non-resource-intensive work and already beating the nine-hour mark in our battery tests, we figured it would cement its place as the ultimate road warrior's machine. And it has, but only really by default.

As with the 11-inch MacBook Air, you've got a 1.6GHz Intel Core i5 dual-core processor, which is a minor update over its predecessor, along with an updated graphics chip (with full 4K external monitor support). The SSD is the other notable change, promising faster read and write speeds – and, unlike our 11-inch model, here we really got it. With both read/write speeds of well over 1,000MB/s, the storage is truly top of the line. This is Mac Pro-level stuff. The processor also saw improvement, albeit a smaller one, completing our real-world video encoding test just shy of 10% faster than last year's model. Unfortunately, we also found a couple of areas where this model has actually regressed compared to last year's in our benchmarks. Batman: Arkham City ran almost 20% slower than last year's model when we tested it – it's possible this is a driver issue that will be ironed out, but it's definitely disappointing.

It's a similar story with the battery life. It lasted 9hrs 4mins in our tests, which is fantastic – a good 30% better than the 13-inch MacBook Pro with Retina display. But it's actually lower than what last year's model achieved: 9hrs 25mins. You'll be using it differently in real life to the prolonged intense task we gave it for the test, so that dip probably won't make much difference (you could argue it's within a margin for error, even), but still – considering that we were hoping for an improvement over last year, a reduction is obviously surprising.

Still, it's the best battery life of Apple's range (we haven't tested the MacBook yet, but if it beats this, we'll be astonished), it's powerful enough for almost all basic home and office use, and it's very comfortable and usable. Like the 11-inch Air, its low price compared to the Retina machines is obvious in the screen, which is comparably lacking not just in detail, but richness in its colors, and offers weaker viewing angles. But it's still a pleasant screen, in a very portable, well made and nippy machine.

**THE BOTTOM LINE.** For most people, we'd still point to the 13-inch Retina MacBook Pro as the best option (it's not much heavier, and offers much better features), but if you want unimpeachable battery life on the move, this is the place to go. Those who bought last year's model won't find themselves in much of a state of envy, though. **MATT BOLTON**

# Audio Hijack 3

A true recording star for your Mac

**\$49 (\$25 upgrade) Developer** Rogue Amoeba Software, [rogueamoeba.com](http://rogueamoeba.com)

**Requirements** OS X 10.9 or later



Each block placed on the audio grid has its own options, saved as presets.

As journalists, we love Audio Hijack for long being one of the best and safest ways to record interviews conducted over Skype, but it's useful to anyone – maybe you need to record a group meeting happening over an obscure web service, or need to get a sound from a file. If it goes through your Mac, this can record it.

**Audio Hijack 3 has been completely rebuilt from the ground up to make it stupidly easy to record every sound your Mac system makes, or only those from specific applications and devices.** This core functionality existed in previous versions, but often with some degree of mystery as to what the final recording would sound like after fiddling with various menus and settings.

That's no longer the case: gone are those archaic controls, replaced by templates used to set up recording sessions for common scenarios, such as voice chats, podcasting, digitizing old vinyl LPs piled up in the closet, or simply ramping up the volume on Macs with tiny speakers. (There's also the option to start completely from scratch.)

Most of the 10 included templates work without modification, but can be further customized using icons from a sidebar on the

right-hand side of the session window. Once placed on the audio grid, these so-called “blocks” control the flow of audio through the application. The library is made up of Sources (what do you want to record?), Outputs (where should the sound end up?), Meters (for in-line visual feedback), and Built-In or Audio Unit Effects that offer aural enhancements such as EQ, denoise, or the very useful option to “duck” one audio signal under another.

Each block can save presets with favorite settings, and sessions can be endlessly customized and reused at a later date. Once configured, a click on the record button starts or stops the process, with orange meters providing reassuring confirmation that the audio is actually being recorded as it moves through the active links between blocks – the digital equivalent of checking the tape is moving.

About the only thing missing is a one-click shortcut to edit audio files in other applications such as Fission; instead, you have to click a magnifying glass icon under Recordings to reveal the file in the Finder, then open it manually. Fortunately it's a minor inconvenience in an otherwise outstanding audio recording powerhouse.

**THE BOTTOM LINE.** Easy enough for novices yet powerful enough for pros, Audio Hijack 3 takes the anxiety out of recording sound from your Mac, making it drag-and-drop simple in the process. **J.R. BOOKWALTER**



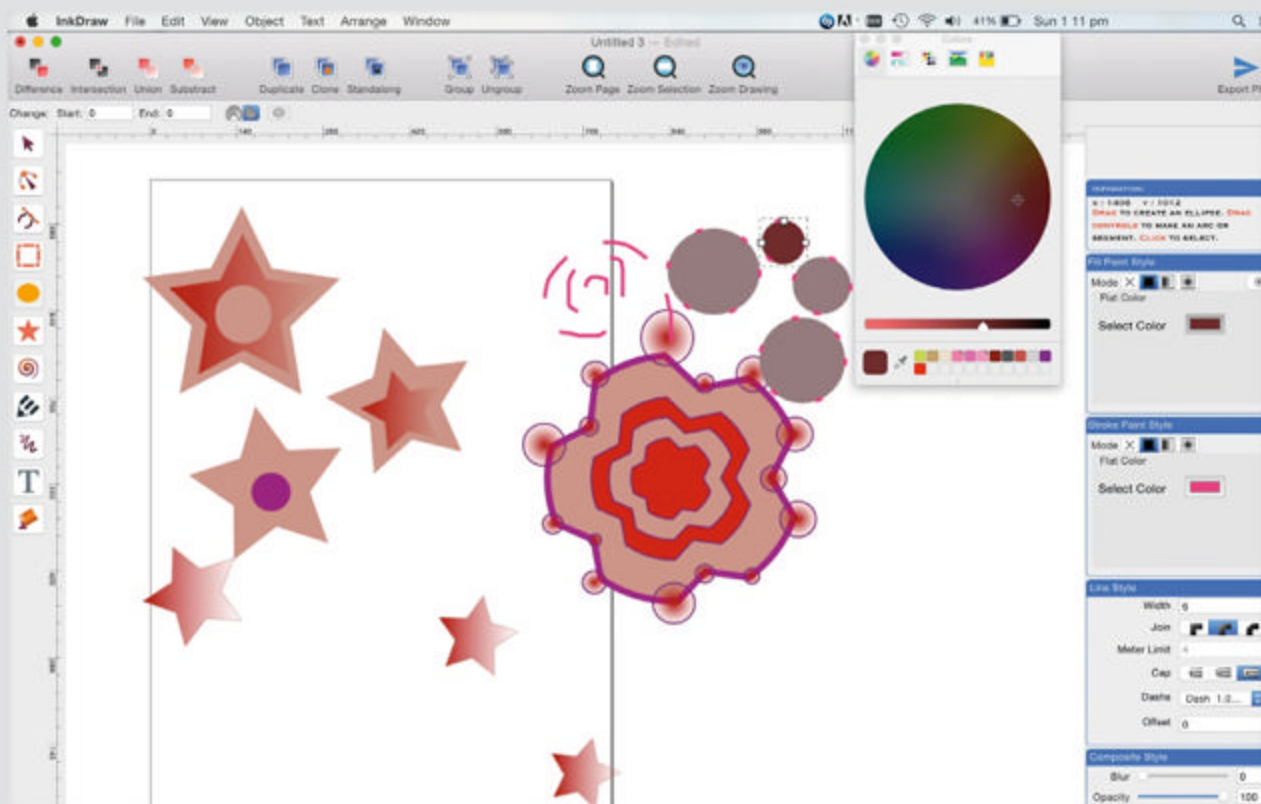
## AUDIO HIJACK 3

- ▶ Overhauled UI makes it simple to record audio
- ▶ Audio grid provides immediate feedback
- ▶ No direct integration with audio-editing applications
- ▶ Recordings don't stop automatically after a certain amount of silence

**AWESOME** ■■■■■



During recording, Audio Hijack 3 provides comforting visual feedback that recording is taking place.



# InkDraw

Winning vector graphics, or just thrift store pixel-painting?

**\$9.99 Developer** Zhang Guangjian, [inkdraw.lofter.com](http://inkdraw.lofter.com)

**Requirements** OS X 10.10 or later

InkDraw has a variety of tools such as gradients, strokes and booleans.

Not everyone has the budget for Adobe Illustrator, so what cheaper options are out there? Previously we've thoroughly recommended Serif's Affinity Designer, but here's InkDraw, a fairly new kid on the block that its devs call "a powerful vector graphics editor." Can you really get an Illustrator alternative for under 10 bucks?

After loading the app we were struck by how simple the interface looks. It appears, perhaps, a little spartan and is definitely an app for beginners, with the vector tools mainly situated on the left in a similar, simpler style to the big boys.

That said, everything seems fairly well laid out and easy to get to grips with. You get some basic shapes like stars, circles and squares, along with a pen tool; we were

impressed you were able to stroke the vectors and even create dotted lines along the shapes or path. You can also use these shapes to cut one away from the other or combine them – quite handy.

**The problem is that InkDraw simply lacks the depth of other vector rivals.** There also seem to be bugs aplenty. At times it can feel a little fiddly to use and has a knack of allowing you to zoom into a selected area, only to not display anything. Rather more worryingly, the app can sometimes get overloaded and crash if dealing with more than just a handful of on-screen elements.

**THE BOTTOM LINE.** Basic vector software which is not without bugs and seems to struggle somewhat with anything too demanding. **JAMES ROBINSON**

## INKDRAW

- Inexpensive
- Easy to learn
- Quite buggy
- Too simplistic

**WEAK** ■■■■



# BusyContacts

If you're drowning in virtual business cards, this could help

**\$49.99** Developer BusyCal, busymac.com

**Requirements** OS X 10.9 or later; iCloud, Google, Exchange, or CardDAV server



BusyContacts' card view keeps you in touch with all of your cloud-based contacts from one place.

Keeping track of people has become a daunting task in the social networking era. The sheer variety of available services makes it nearly impossible to organize everything in one place, but this sidekick to popular calendar application BusyCal does the job admirably.

BusyContacts syncs cloud-based contacts from a variety of sources and assembles them in a single place on your Mac. iCloud, Google, Yahoo, Exchange and Office 365, as well as social networks like Facebook, Twitter, and LinkedIn, are all present and accounted for here, along with most any CardDAV server or LAN-based address book.

**Adding accounts is a snap, and BusyContacts had no problem linking services protected with additional security measures,** such as Google's two-factor authentication. Once added, individual accounts become color-coded and can be independently turned on or off.

Our favorite feature is the ability to combine card data: BusyContacts links duplicate contacts

with the same name or email address into a single virtual entry, retaining the option to view individual cards with a single click. Cards can also be linked and merged, which writes changes back to compatible services such as iCloud or Google.

There are a couple of caveats to this otherwise convenient feature. Contact data from social networks is read-only and can't be edited, although data fetched from those services can be copied to your address book, including profile photos and birthdays from Facebook. LinkedIn data can only be stored locally without a network connection for up to 24 hours, although BusyContacts intelligently re-syncs contacts the next time you're online.

One huge benefit to having data in one place is the ability to view recent email threads, Facebook posts, and tweets while viewing a contact card. You can even reconnect via a tweet without leaving the application.

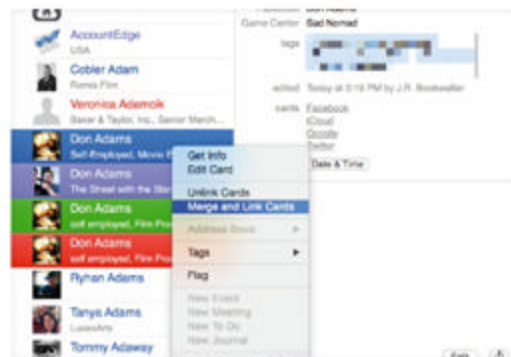
The only real bummer will be for iCloud-averse users storing contact data with the old-school "On My Mac" method – BusyContacts can import local contacts, but changes won't sync back to the built-in OS X Contacts app as they do from iCloud.

**THE BOTTOM LINE.** BusyContacts aims to be the one address book to rule them all, and succeeds quite nicely. **J.R. BOOKWALTER**

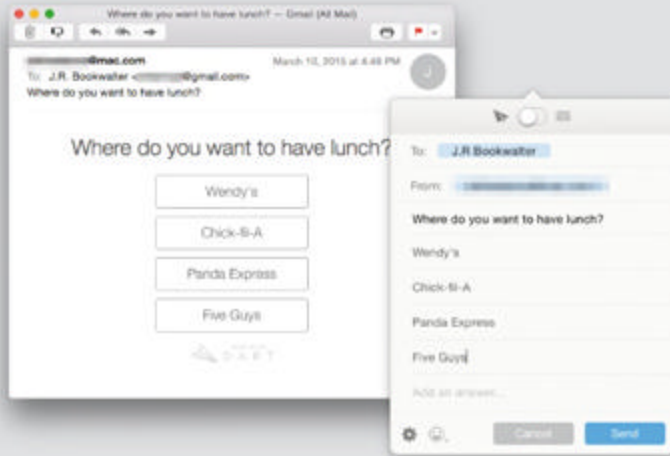
## BUSYCONTACTS

- Gathers contacts from multiple cloud services
- Cards with multiple entries can be linked or merged
- Quick Contact creates new entries from key details
- Details from social networks are read-only

**GREAT** ■■■■■



Multiple entries for the same contact? BusyContacts makes it easy to link or merge them into one.



## Dart

Send love letters straight from your Dart

**\$1.99 Developer** Moople Apps, dart.email

**Requirements** Mac OS X 10.9 or later

Dart cuts emails down to size. From the Mac menu bar, you can compose short messages with a series of predefined answers, sent from the email account of your choice. All that's required from the recipient is to select an answer and hit send.

There's also a traditional mode with subject field and 200-character message for more involved missives. Messages can include emoji but not image attachments, and you'll need an email client for reading replies – Dart is strictly about sending messages.

There's zero setup, since the app takes advantage of accounts already on your Mac (and others can be added), although you'll need to re-enter passwords before sending for the first time. iCloud, Gmail, and Outlook accounts with two-factor authentication all work, but require the generation of app-specific passwords.

On the downside, sending from iCloud accounts is limited to the default alias in Mail preferences, and a preference setting to start at login refused to stay selected.

**THE BOTTOM LINE.** Dart is convenient for sending bite-sized email text messages from Mac, but it won't replace your existing email or messaging clients. **J.R. BOOKWALTER**

### DART

➦ Send text-message-like emails from Mac menu bar

➦ Works with existing Mail accounts

🔴 "Start at login" preference doesn't work

🔴 No image attachment support

**GOOD** ■■■■

## Data Rescue 4.1

Recover lost and corrupt data

**\$99 Developer** Prosoft Engineering, prosofteng.com

**Requirements** Intel Core 2 Duo 2 or later, OS X 10.7.5 or later, second drive

Data Rescue 4 is a long-awaited update; Prosoft's heavyweight tool has long offered one of the best shots at recovering data from your hard drive. It's capable of reading and copying data from physically failing drives as well as the relatively simple task of recovering lost or deleted files. As long as the drive is still visible to OS X, Data Rescue can help.

Version 4's main new feature is BootWell, which works outside of OS X to recover data from your main drive. This technology requires a USB flash drive – you can supply your own, or buy one pre-loaded for \$15 plus shipping.

The latest version also implements NTFS support for recovering data from BootCamp-partitioned drives and makes fewer demands on your Mac, so won't tie it up during lengthy recovery sessions. It may not be the quickest, but Data Rescue remains the best tool for maximizing your chances of rescuing your data outside of an expensive recovery specialist's lab.

**THE BOTTOM LINE.** Data Rescue 4.1 doesn't reinvent the wheel, but adds useful tools to make it a worthy investment. **NICK PEERS**

### DATA RESCUE 4.1

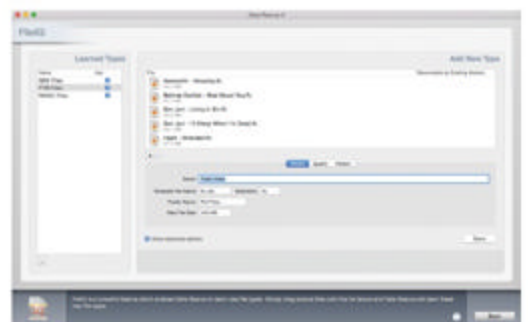
➦ New BootWell environment

➦ Consumes fewer system resources

➦ Works with multiple disk formats

🔴 Clone feature wipes target drive

**GREAT** ■■■■



# Das Keyboard 4 Professional for Mac

It's expensive, but then this keyboard makes your words feel *important*

**\$175** **Manufacturer** Metadot, [metadot.com](http://metadot.com)

**Requirements** OS X, USB port

Most people probably don't think much about their keyboard, not least because the aluminum keyboards that Apple makes are damn good. Keyboard purists, however, will tell you that you can be faster and more accurate on a keyboard with mechanical switches rather than Apple's scissor switches – and that's what you get in the Das Keyboard 4 for Mac. We couldn't confirm a newfound accuracy from our testing, though we do know that if you're a fast typer on Apple's keyboards, you'll spend the first few days fumbling about here, retraining muscle memory. But once that happens, we found that we were about as fast – and there's a bonus. A glorious, thumping, clattering bonus.

Everything you write, from a reminder to buy milk to the next great American novel, suddenly seems imbued with importance and gravitas thanks entirely to the noise you make with this keyboard. It broadcasts to the office that what you are doing is *vital*. And, let's be clear, you will be broadcasting it right across the office. The Matias Tactile Pro – the king of Mac mechanical keyboards – is louder, but this one makes a lot of noise. It's just this side of acceptable for a lively office, though.

It's USB 3.0, so the keyboard isn't bottlenecking peripherals attached to its two ports, and there are some dedicated Mac buttons in addition to Command, Option and so on. The media playback buttons worked for iTunes, but previous/next wouldn't work for Spotify, unlike other keyboards. Plus the F1-F13 keys really are function keys, not the now-traditional keys for triggering Mission Control and so on, which isn't especially useful for most people. The 6.5-foot cable will be welcome for some, and the magnetically attached angle riser that doubles as a ruler is a nice touch, but it's the typing experience you'd buy this for.

For our money, the Matias Tactile Pro is still unbeatable if you want a mechanical keyboard for your Mac – not least because each key cap is printed with the alternate characters it can type – but it's antisocially loud. If you want the feel of a mechanical keyboard with less of the racket, this “Blue Switch” variant is a solid investment (there's also a quieter “Brown Switch” model, though Metadot told us its keypresses aren't as crisp). Be aware, though – if you've been using Apple's keyboards for years, far from speeding up your word rate and accuracy a mechanical keyboard might actually slow you down, at least at first.

**THE BOTTOM LINE.** Without a doubt the keyboard Nick Fury would use, in the unlikely event he'd use a Mac. **CHRISTOPHER PHIN**

## DAS KEYBOARD 4 PROFESSIONAL

- Hugely satisfying to type on
- Could just about be used in an office
- Integrated ruler (no, really; it's useful!)
- Some media playback and control wrinkles

**GOOD** ■■■■■■





Yes, that is a volume knob.  
No, it's not for the sound of  
the keypresses.

# Expense Manager

Make sure you get a receipt for this one...

**\$9.99** Developer iLifeTouch, iLifeTouch.com

**Requirements** OS X 10.7 or later



Expense Manager offers a lot of visual flourish – largely untouched from the iOS version.

If you look at your pay stub each period and wonder where all the money goes, it might be time to start paying closer attention to those outgoing expenses. Unfortunately, you'll also want to look elsewhere for a Mac app that's fully up to the task, because Expense Manager certainly isn't it.

Based on feature set alone, Expense Manager has all the makings of great financial software: multiple user support, password protection, attractive graphs and pie charts to help visualize spending patterns, automatic backup, and iCloud sync to keep all of your Macs and iOS devices on the same page.

**The problem is, the user interface seems to have been an afterthought, and manages to get in the way at nearly every turn.** Non-standard buttons make it hard to know what they do until clicked – for example, the right-hand Tag icon doesn't "tag" anything, and instead displays options to filter graph and bar chart data by user, date, and other criteria.

More annoyingly, you can't use all the adjacent space next to that button to grab and move the window as with other Mac apps, even though this method actually *does* work on the

left side above the search field. The layout appears to have been awkwardly ported from iOS, where these decisions make more sense; the lack of a Help menu or user manual only adds to the confusion.

Expense Manager can also attach receipts to entries, but only from existing files on the Mac. The inability to use a built-in FaceTime camera to grab a quick snapshot feels like a lost opportunity, and sadly there's no support for scanners either.

Data export is also hit-or-miss: Expense Manager offers a range of print, CSV, text, and PDF output choices, but with no option to see individual entries alongside their visual equivalent – PDF and printed data winds up being little more than a screenshot of the app itself, and a low-resolution one at that.

Expense Manager also commits the cardinal sin of pimping another of the developer's apps *every single time* the app is launched — the more expensive Daily Expenses, which adds income and budgeting to the mix. This one "feature" alone will have you regretting the decision to spend 10 bucks in the first place.

**THE BOTTOM LINE.** Blatant adware aside (in a paid-for product!), Expense Manager has the potential to become a handy Mac finance app, if the questionable UI and usability issues are addressed. **J.R. BOOKWALTER**



The mysterious "Tab" button actually sorts graph and chart data in various ways, but in a very awkward way.

## EXPENSE MANAGER

- ▶ Expense tracking with wide range of features
- ▶ Cumbersome user interface
- ▶ Subpar print and PDF export options
- ▶ No Help menu or user manual available

**OKAY** ■■■■■



The Withings Home unit enables you to keep an eye on your home from your iOS device, but the tech could be improved...

## Withings Home

Check in on your home - and assess the air quality

**\$199** **Manufacturer** Withings, withings.com

**Features** 5MP CMOS sensor, 1080p HD video, night vision, 135° viewing angle, 2W two-way speaker

**W**ithings knows a thing or two about style and this HD camera with built-in air monitoring has an excellent build quality. The cylindrical camera is covered in a lightly toned wood cladding and can be twisted to hide the lens when idle. At the bottom is a color-changing light which acts as a night light for a nursery or ambient glow for any room. The camera sits on a magnetic dish which enables you to rotate it and, crucially, keep it stable. On the rear there are three connection ports - micro-USB power, Ethernet and USB 2.0 - along with two environment sensors. It can connect wirelessly too.

The 5MP sensor should deliver great quality, but it's simply satisfactory. The 12x zoom is a nice idea, but not when it's so blurry. Equally, the audio feed (two-way via a speaker at the top) is merely passable. And when recording is triggered (such as by movement) it's often quite delayed, and only action very close to the

camera seemed to kick it into action. On the air quality front the readings we got were rather sporadic, switching from good to medium in a living room that was unoccupied all day. We did get the warnings we expected when using it in a garage with the lid off some creosote though!

We weren't wowed by the tech, but the companion app offers some clever features. The Withings Home will keep a diary of its continual observation, snapping a photo when there's movement and switching to video if it detects heavy movement or sound. You can view a 12-hour summary, and you can have up to two days of recordings. Initially, the app was unstable and prone to crashes and randomly disabling some functions. Most of these problems have since been corrected thankfully, but detection issues still remain.

**THE BOTTOM LINE.** A camera that looks good in any home, but we expected more from its headline features. **CHRISTIAN HALL**

### WITHINGS HOME

- ▶ Nice looking for an IP camera
- ▶ Easy setup and app use
- ▶ Poor audio quality
- ▶ Some oddities in readings

**SOLID** ■■■■





We love the fact you move your finger around the back to adjust the volume.

## B&O Play H8

High-quality Bluetooth headphones that look great

**\$499** **Manufacturer** Bang & Olufsen, [beoplay.com](http://beoplay.com)

**Frequency** 20Hz-20KHz **Connectivity** Bluetooth 4.0, 3.5mm cable **Weight** 255g

Bang & Olufsen has a rich history of designing high-end, luxurious audio kit, and the H8 on-ear headphones are no different. The H8 is B&O's first Bluetooth set, and its first with active noise cancellation.

The unboxing experience is pretty exciting. The H8s are presented – in all their leather and anodized aluminum glory – folded flat. You know these are a premium set of 'phones from the offset. The leather headband, lambskin earpads and aluminum, look and feel stunning. And they are hugely comfortable.

As well as looking good, the H8s have some innovative features. They're wireless (although you can plug a cable in) and they feature intuitive pressure-sensitive controls on the right earcup. Tap the middle to play/pause, rotate your finger around the circumference to turn

volume up or down, swipe left or right to skip tracks and swipe up or down to turn active noise cancellation on and off. And this soon becomes second nature. Noise cancellation is also excellent. The sound? Highs are refined, bass is warm yet not overpowering. Think neutral with a bit of warmth. Of course, these are aimed squarely at the smartphone commuter: they are light, sound great and are incredibly portable.

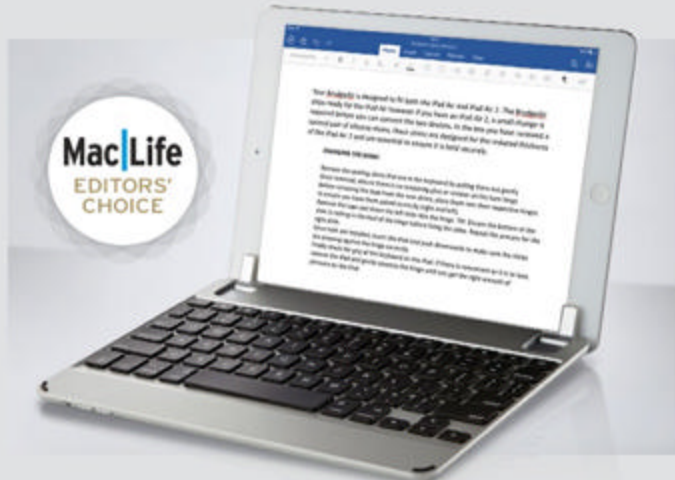
The only real disappointment is the quality of the supplied cable, for when you don't want the Bluetooth functionality – it's surprisingly poor. There's also no inline mic either, which would have been a nice addition.

**THE BOTTOM LINE.** Stylish, great-sounding headphones you can use without wires, the H8s are a great buy. But you have to have a pretty large wallet to afford them. **ROB CARNEY**

### B&O PLAY H8

- ▶ Great sound
- ▶ Beautiful luxurious design
- ▶ Intuitive touch control
- ▶ Poor cable supplied and no inline mic

**GREAT** ■ ■ ■ ■ ■



## BrydgeAir

The closest experience to a 9.7in MacBook

**From \$111** Manufacturer Brydge Keyboards, [brydgekeyboards.com](http://brydgekeyboards.com)

**Requires** iPad Air, iPad Air 2 **Connectivity** Bluetooth

This keyboard case is different from its all-plastic competition. It's made out of the same aluminum as a MacBook and has been designed to look like a 9.7-inch version of Apple's laptops. It's not as lightweight as most other keyboard cases and dispenses with the convenience of a magnetic connection. But that's to your advantage – here you get a sturdier experience.

We're in the territory of 11-inch MacBook Air comfort, thanks to the excellent replication of the MacBook keyboard and a near identical layout (with brightness, volume and lock controls). It's also got four levels of backlight to ensure it's as usable as a real MacBook in low light. You also get dual stereo speakers, though you need to set up a second Bluetooth connection for them.

Instead of the magnetic clasp seen in most other designs, the BrydgeAir uses two tough hinges that grip the areas just off the iPad's screen. The hinge recesses are quite deep and ugly, and you have to swap rubber grips for using the iPad Air 2, but those are forgivable compromises.

**THE BOTTOM LINE.** The BrydgeAir is a high-quality keyboard that truly makes the iPad viable for sustained typing.

**CHRISTIAN HALL**

### BRYDGE AIR

- ✦ Strong and balanced in weight
- ✦ Similar to a MacBook keyboard
- ✦ Backlit keys and stereo sound
- ✦ Hinge elements are ugly

**AWESOME** ■■■■■

## WD My Passport Wireless 2TB

High-capacity wireless drive

**\$300** Manufacturer Western Digital, [wdc.com](http://wdc.com)

**RPM** 5,200 **Buffer** 8MB

This portable wireless drive packs in a 3,400mAh battery (which WD says will power the drive for up to six hours), a Cortex A8 system-on-chip, 512MB of RAM, 128MB of flash memory, an SD card reader and dual-stream 2x2 MIMO Wi-Fi module.

At its heart is a big hard disk drive, a 2TB 2.5-inch model which runs at 5,200 RPM and has a mere 8MB buffer. The drive offers a built-in SD card slot, and there are LED indicators for power and Wi-Fi strength plus a standard USB 3.0 connector. One smart feature is support for FTP which will be welcomed by anyone paranoid about saving their data to the cloud automatically. Power users will also like the fact that it can be used as a bridge (to share an internet connection with other devices) and includes a DLNA media server. You will need Western Digital's My Cloud iOS app to access most of these features. The app, which is compatible across a number of WD's cloud storage products, offers a decent amount of functionality, although file support is limited.

**THE BOTTOM LINE.** Heavy and bulky than the competition, and the performance won't set the world on fire. **DESIRE ATHOW**

### WD MY PASSPORT WIRELESS 2TB

- ✦ Support for FTP
- ✦ Bundled card reader
- ✦ Average performance
- ✦ High price

**GOOD** ■■■■



# The Sims 4

Bringing emotional maturity to The Sims

**\$49.99 Developer** Electronic Arts, ea.com

**Minimum requirements** OS X 10.7.5, Intel Core 2 Duo 2.4GHz, Nvidia GeForce 320M, 9600M, 9400M, ATI Radeon HD 2600 Pro, 256MB video RAM, 4GB RAM, 10GB hard drive space

The Sims 4 is deceptive. If you're familiar with the older games in the famous series of people simulation, where you create Sims and guide them through their lives, the new one might look cartoony and overly simplified. Yet, right from the start, that's not the case. The Sims you make are more customizable, but complex sliders have been replaced by a new Create a Sim tool that lets you push and pull at features like putty. Building houses is easy too; wannabe architects can design them inch-by-inch, but those with less time can add whole rooms at a time, letting you get to the good stuff: playing with lives – jobs, relationships, and all.

Where The Sims 4 excels is not just at that accessibility, but what it hides, too. At its core is a complex simulation that brings digital dolls that little bit closer to believable characters. Events and personalities interact to put your Sims in particular moods, having unique effects on your Sims' lives. A Sim with a gloomy personality is more likely to react badly to a negative event and end up in a sad mood; they'll get a creative boost when writing their novel but they might stop typing and put their head in their hands for a quick cry. It's unsettlingly realistic.

Also realistically, each Sim always wants more than you can manage: life goals with stages made up of sub-goals (such as training a skill to a certain level), goals for each stage of their career, goals for special events like going on a date, and whatever passing wants and fancies their current mood inspires. Unfortunately, technical considerations sometimes interfere with plans. If you want to take your Sim to a community lot such as a bar or park, or to visit another Sim – whether player-created or not – you'll face a loading screen, unlike with The Sims 3. The loading times are short on any decent machine – the only significant tech issue we found was the game not displaying properly until we'd switched out of fullscreen mode and specified new screen settings – but even so it can feel a hassle to travel.

As always with new entrants in this series, fans will yearn for what they've gotten used to, and features that have been left out. But with updates already adding back in some of the more notable omissions (such as swimming pools), The Sims 4 should be treated like its predecessors: a basic but solid foundation to which players can add whichever of the inevitable expansions they choose. The new simulation and its interplay between Sims' personalities, moods, and desires means that players of all kinds – creators, goal-oriented players, and storytellers – even those new to the series, will find something for them.

**THE BOTTOM LINE.** More simple to play than previous versions, but with a better simulation at its core. **JORDAN ERICA WEBBER**

## THE SIMS 4

- More realistic emotions
- Accessible creation tools
- Always lots to do
- Some display issues

**GREAT** ■■■■■







# Frozen Cortex

Don't let the name fool you - this is one hot sports game

**\$24.99** Developer Mode 7 Games, mode7games.com

**Requirements** OS X 10.9, 1.2GHz processor, 4GB RAM, OpenGL 3.1+ and 1GB VRAM



Take advantage of the terrain by using walls as extra blockers.

In the near future, robots will replace flesh-and-blood athletes as the executors of a violent sport called Cortex, which is developer Mode 7's asynchronous turn-based take on football. Frozen Cortex actually only has three rules: ball carriers can only pass or run toward their goal line, a team can only pass three times per possession, and the game resumes immediately after a turnover.

In the planning phase of each turn, you can issue commands, plan players' movement along intricate routes, and plot the arc of the ball as it moves through the air. Cortex arenas are randomly generated and studded with low walls you can throw over and high walls you can't, creating both thin, murderous alleys and open expanses. For extra granularity, you can put each planned step on a timer, delaying jukes until blockers should be in place, or avoiding soon-to-be-congested intersections.

But both players do all this planning at the same time, blind to the other's plans. Once

each coach's play has been submitted, they resolve simultaneously as the camera zooms in to render the action in sleek neon.

The crux of Frozen Cortex is that plays can be simulated before they're locked in. While terrain and positioning sometimes combine to make success inevitable, there are edge cases in which the difference between a goal and a turnover is whether a defender zigs or zags, slides over to intercept a pass or blocks an intersection with broad, metallic shoulders.

**There's just enough uncertainty in each play to keep tension running high.**

Unfortunately, some of that uncertainty is caused by the cursory tutorial and superficial in-game manual. It's one thing to know that the **C** key displays a player's tackling radius, for example, but it's quite another to know how tackles are triggered, how to prevent them, and how to use that information tactically.

Finding multiplayer matches is a breeze, despite the relatively few players online at a given time: you can play several games at once, and Frozen Cortex will even send you an email if your opponent submitted a turn while you were offline.

**THE BOTTOM LINE.** With short, explosive games that feature both meticulous planning and highlight-reel collisions, Frozen Cortex is a great strategy-sports hybrid. **JOSEPH LERAY**



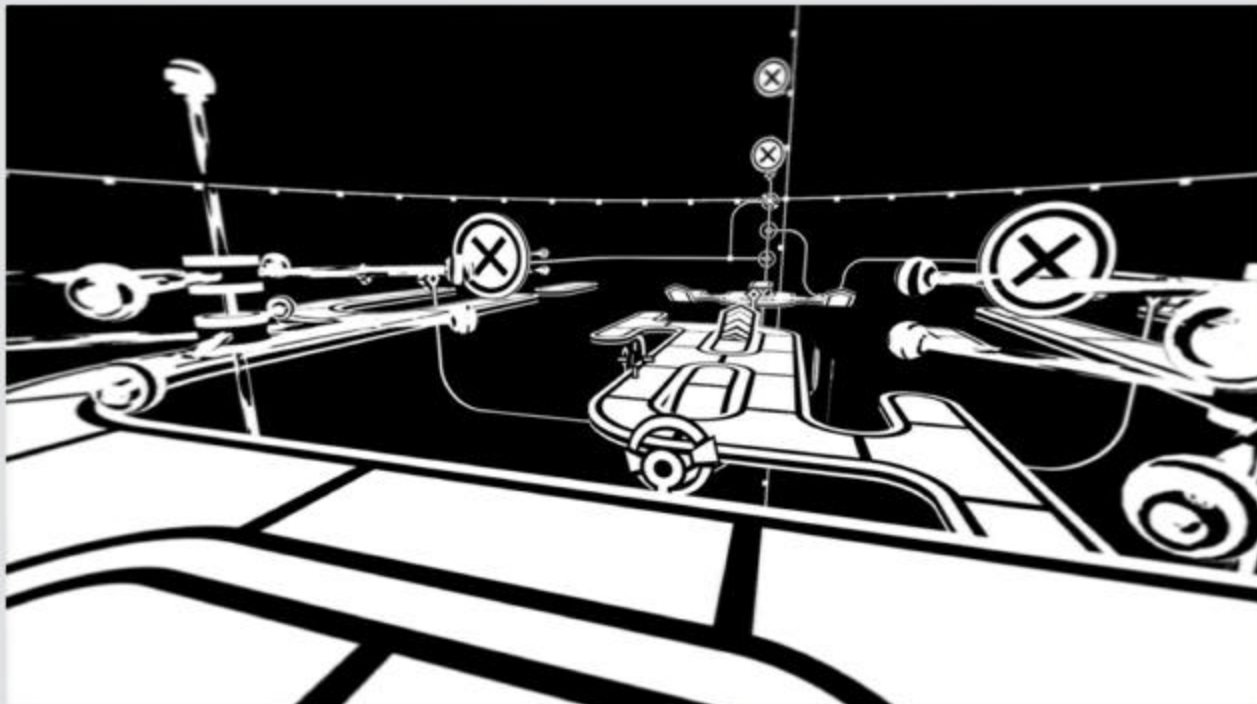
If defenders are slow to move into passing lanes, punish them with a quick score.

## FROZEN CORTEX

- ▶ Smart, satisfying tactical play
- ▶ Funny ancillary dialog
- ▶ Franchise mode is a little threadbare
- ▶ Can be frustratingly opaque until it clicks

**GREAT** ■■■■■





# Parallax

Start looking at things in black and white

**\$9.99 Developer** Toasty Games, [toastygames.com](http://toastygames.com)

**Requirements** Mac OS X 10.6 or later, 1.4GHz processor, 512MB RAM, 150MB available space

Contrast and confusion; this puzzler doesn't deliver on the all-important eureka front.

Parallax's puzzles are right there in black and white. Then, you pass into a parallel dimension and they're now in white and black. To succeed in these abstract worlds, you must hold two physical environments in mind and understand how they affect each other. A switch in the black flips a door in the white, and so on. You're manipulating a path through each stage towards the exit teleporter. It's certainly challenging, but it's also not very satisfying.

Puzzle games need a eureka moment. What makes games like *Portal* and *The Talos Principle* so satisfying is the little burst of dopamine when you figure out the solution. Parallax is a first-person puzzler like them, but it lacks that satisfaction: you find yourself frantically activating buttons, hoping for a lucky twist of a metaphorical monochrome Rubik's Cube. It's confusing, not perplexing.

There's a huge contrast (no pun intended) between *Portal*'s elegant challenges and the heightening complications of Parallax. The latter simply demands too much from the player, and the further you get into the game, the greater this crushing cognitive load. There's no way to save in the middle of a course, and you can't skip a puzzle if you're stuck. Solutions come from testing permutations rather than deductions, so you bounce around the place in search of a solution (though there's little room for improvisation) while the game counts "deaths" from falling off the level, an unnecessary design contrivance.

**THE BOTTOM LINE.** Parallax is a clever two-minute tech demo that fails as a complete game. Like that aforementioned monochrome Rubik's Cube, you're very quickly stuck with a half-finished mess of contorted possibilities. **ALAN WILLIAMSON**

## PARALLAX

- ▶ Interesting concept
- ▶ Uninteresting execution
- ▶ When you're stuck, you're stuck
- ▶ Doesn't support Retina displays

**WEAK** ■■■■■





# ASK

TECH SUPPORT & TECHSPLANATIONS



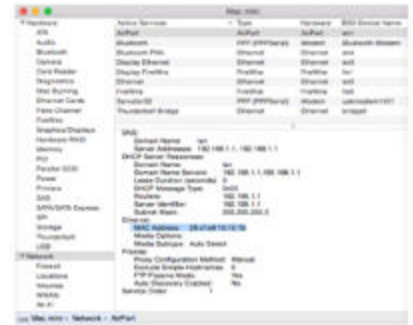
Macs don't really need third-party security apps, and usually run better without them.

## SECURITY SOFTWARE SLOW

After upgrading my 27-inch iMac, I noticed my Kaspersky for Mac software was not working properly. It successfully activated, but I found Time Machine backed up at a snail's pace to my external NAS drive. Apple advised an erase and reinstall, which returned Time Machine to normal speed. When I redownloaded and activated Kaspersky, Time Machine was slow again. Any advice?

Yes, and that advice is: you don't need any. OS X is already extremely secure, and it is automatically updated for free as new vulnerabilities are discovered. Our personal view is that third-party security packages exaggerate the threats you are

exposed to, and offer nothing that isn't already handled well by OS X, your router and your ISP. Worse still, as you have found, the software can itself be a source of slowdowns and incompatibilities with the rest of the system.



You can use System Information to look at the MAC addresses of your network adapters.

## Can't buy apps through a USB Wi-Fi adapter

The Wi-Fi card in my 2011 MacBook Air failed, so I'm using a USB Wi-Fi adapter, which works fine. However, I cannot sign into the App Store or FaceTime. An error says "Your device or computer could not be verified. Contact support for assistance."

The App Store, iCloud, FaceTime and several other services use the MAC address of your computer as part of the verification process. This doesn't refer to Apple Macintosh; it stands for Media Access Control and it is a unique serial number hard-coded into every network device by its manufacturer. Your IP address can change between sessions and locations, but a network interface's MAC address never changes.

The USB adapter is a network device in its own right, with its own MAC address. When you access the App Store through it, you are using that MAC address, not the one that was originally authorised for the built-in Wi-Fi adapter. This trips an "intruder alarm" at the App Store which locks you out. You should be able to fix this quite simply. Delete /Library/Preferences/System Configuration/NetworkInterfaces.plist, then log out and then back in again.

## Relocating Parallels virtual machines

I am constantly fighting to keep my 2014 MacBook Air's 128GB SSD from filling up. I use Dropbox to store files and don't install many apps. However,

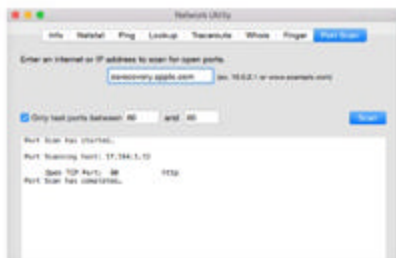
I use Parallels with Windows 7 to run electrical certification software called EasyCert, which isn't available on OS X. Parallels seems to be using about 30GB. Could this be run from a 32GB SD card? Otherwise, can I move some files/folders to the SD card and point Parallels to them?

You can certainly run Parallels from an external storage device and, provided that EasyCert isn't too demanding, maybe even a memory card. You don't actually need to move Parallels itself; the bulk of the disk space is taken up by the Windows virtual machine. You can move this .pvm file off your hard disk to a new location and double-click it from there to launch Windows. Be prepared for a much longer boot time though. Even a fast class 10 SD card has read times of only 60-90MB/sec, compared to more than 700MB/sec for your MacBook's SSD. For only a little more, a USB hard drive such as the Samsung M3 1TB (\$70 on Amazon at the moment) is much faster.

## Has Apple blocked us?

**My husband tried to use Internet Recovery on his MacBook Air, to take it back from Yosemite to its original Mountain Lion installation. He was unable to do so and even contacted our ISP, who could only conclude that Apple must have "blocked" this facility. Could you please explain how Internet Recovery should work?**

Macs have two ways to reinstall the operating system. Recovery mode (restart with **⌘** + **R** held down) will restore from the recovery partition on their internal storage, which will contain



If you can't reach the Internet Recovery servers, check your firewall.

## > Should I backup my backup now?

**My external USB hard drive, which I use with Time Machine, isn't recognized in Finder anymore. Disk Utility says that it can't repair the disk and tells me to back it up and reformat it. But it is the backup drive! Is there any other software that might be able to rescue it?**

Yes, but you don't want them. Backup disks aren't immune to the same random failures that can hit the internal storage in your Mac. Time Machine drives in particular receive about as much wear and tear as your main drive, because they are performing hourly backups whenever your Mac is in use. The hope is simply that both disks won't fail at the same

time. If your main drive fails before the backup, you replace it and restore from Time Machine. Likewise, if the backup drive fails first, you should simply replace that and create a new Time Machine backup. There are respectable third-party utilities such as DiskWarrior ([alsoft.com](http://alsoft.com)) that can recover a hard drive, where Disk Utility cannot. You

might be tempted by this option if your main drive fails and you don't have an up-to-date backup, but it never makes sense for a backup drive. DiskWarrior costs \$120 (about £80) and for that amount you could replace the backup drive. Backups are important enough that you don't want to trust them to a drive that has failed once already.



the most recent version of OS X installed on your Mac. The other way is Internet Recovery, which downloads the original OS version that shipped with your Mac. To use this, restart with **⌘** + **⌥** + **R**.

Now, if that doesn't work, it certainly isn't because Apple is blocking the service - that would make no sense at all. But your ISP or the firewall on your router may be doing so. Internet Recovery needs to be able to contact two specific server names. You can check this is working from Network Utility (use Spotlight to search for it, because it's not in the Applications folder). Enter [osrecovery.apple.com](http://osrecovery.apple.com) as the address and get it to scan ports 80 and 443. Network Utility only lets you scan contiguous ranges of port numbers, so you will have

to run one scan from 80 to 80, and another from 443 to 443. If you try scanning from 80 to 443 in one go, it will take an age while it waits for all the invalid ports to time out.

If the ports open correctly, you will see a message saying "Open TCP Port: 80 http" - or "https," in the case of port 443. If the port can't be opened, there will be a long pause and then it will simply say "Port Scan has completed." Do the same thing for [oscdn.apple.com](http://oscdn.apple.com).

If either port on either server does not respond, then a firewall or proxy server somewhere in your internet connection is blocking access to the necessary servers, or your DNS server isn't generating the right internet address for the server names. This might sound complicated,





Not everyone prefers the modern low-profile keyboard style.

>>> but this test is just to enable you to show your ISP that the problem is its to solve rather than yours.

## Older keyboards don't work in Yosemite

**After updating to 10.10.1 on my Late 2012 iMac and my 2014 MacBook Pro, I find that my USB keyboard does not operate correctly on either machine. It was fine on Mavericks. I still like to use a "proper" keyboard with real keys for typing rather than the current rubber-button styles, so I use a Mac frameless USB keyboard. Is there any way to make the keyboard map correctly or is there an equivalent keyboard available that will work correctly with 10.10.1?**

The issue with the old-style keyboards on MacBooks had been reported in Mavericks too, but it seems to have got worse in Yosemite. They either don't respond at all, or suffer from keys that act like they're stuck down. You can sometimes wake them by plugging a memory stick into one of the keyboard's USB ports. But you can buy great new mechanical keyboards – see the Das Keyboard on p72, or the Monoprice K11 USB Keyboard, about \$20 on Amazon, is a good option (Windows layout, though).

## Supersizing a MacBook

**I recently bought a 13-inch Retina MacBook Pro but I've realized that the 128GB model is too small for me. Is it possible to fit a larger SSD?**

The mid-2014 MacBook Pro is fairly easy to get inside with a pentalobe screwdriver (around \$7 on Amazon), but this will void your warranty. Anyway, you can't buy an SSD compatible with this model right now. Other World Computing ([eshop.macsales.com](http://eshop.macsales.com)) says it will offer one, but still doesn't have a firm date. You can use an external drive to offload some your data onto, or use a Transcend JetDrive Lite SD card, which sits flush with the Pro's SD card slot.

## Why is iTunes quieter than Quick Look?

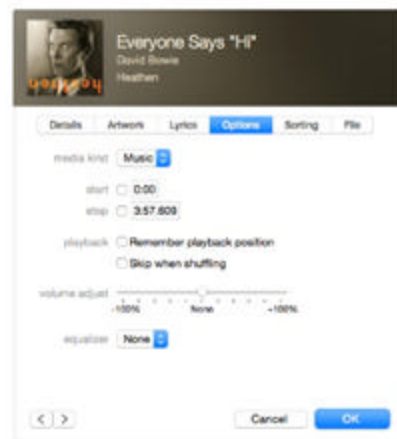
**I have some MP3 tracks that are nice and loud when opened with Quick Look, but they're noticeably quieter in iTunes. I have turned up the preamp but it's still not as loud as Quick Look. I use an iMac with Yosemite and have the latest version of iTunes.**

The preamp isn't usually the best way to boost the volume, because it adds distortion. The reason iTunes is quieter for most tracks is that Sound Check is

turned on in its preferences. This feature attempts to normalize the loudness of songs by calculating the average loudness of an individual track and then adding an adjustment factor to that track's ID3 tags. This boosts the volume of a few very quiet tracks, but most tracks end up slightly quieter in order to compensate – about 10% is the figure we've seen quoted.

Sometime in the last couple of versions, Apple quietly tweaked Sound Check so that it preserves the intrinsic loudness of a track when you are listening in album mode. This allows artists to have intentionally quiet tracks without iTunes dragging them up to match everything else. If you listen in shuffle mode, though, those quiet tracks will sound much louder, because Sound Check is boosting them.

The important thing to realize is that Sound Check doesn't change the audio data in a file at all – it just adds an extra field in the ID3 metadata of a file. When you listen to MP3s through Quick Look, you are using the QuickTime audio engine, which ignores this metadata and plays the track at the original gain level. So just turn off Sound Check in iTunes.



Manually set a track's volume level by right-clicking it and choosing Get Info > Options.

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MacLife



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# CREATE

HOW TO DO ANYTHING ON YOUR MAC, IPHONE & IPAD

## Screen sharing in Messages

Use this powerful native function to help friends use their Macs

### REQUIRES

- > OS X 10.9 or later, iCloud account, a friend with OS X 10.9 or later and an iCloud account

### LEVEL

- > Easy

### IT WILL TAKE

- > 30 minutes



**OS X (MAVERICKS and Yosemite)** has a really useful function called Screen Sharing. With it, you view the screen of a friend's Mac while having an audio conversation with them. Once you start Screen Sharing, a FaceTime Audio chat is automatically started, so you can talk the other person through whatever OS X process they are trying to do. Screen Sharing is an extremely useful feature if friends regularly ask for help with OS X or vice versa. As you view the screen, you can click on things to highlight them, so you both see a small circle highlighting that part of the screen. You can also take control of the other person's screen (with their permission) and can control their cursor using your mouse or trackpad. You can even copy files from your Mac to theirs, or the other way around. All while you're talking them through things.

With Screen Sharing you can help someone get to grips with OS X's features, or get help yourself from a friend. All you need is the Messages app and their Apple ID. Let's see how it works...

**LUCY HATTERSLEY**

### Quick look Screen Sharing



#### Screen window

When you have the Screen Sharing app open, you'll see that it features just a single window that displays the desktop of another Mac computer.



#### Click to highlight

Click and hold the mouse inside the Screen Sharing window to reveal this circular loupe. This also appears on the other person's computer, enabling you to point out key parts of the OS X interface.



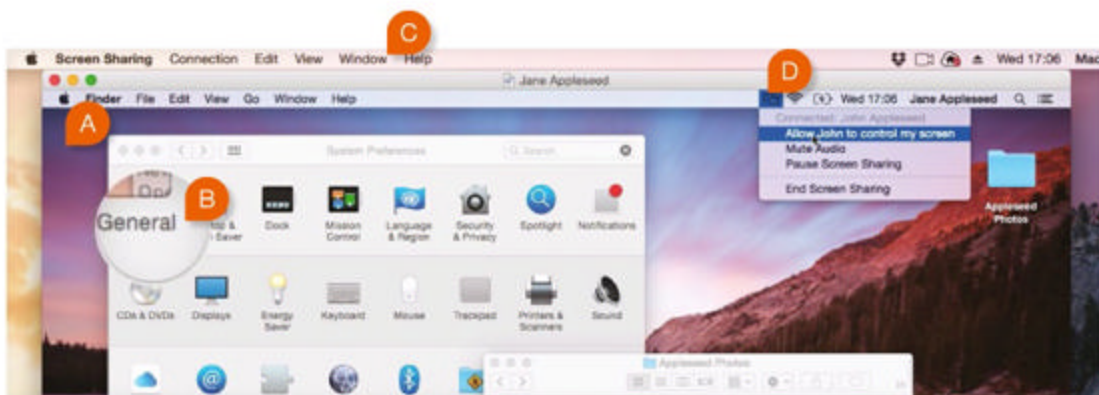
#### Explore menus

Though it doesn't appear in your Applications or Utilities folders, Screen Sharing is an app. Explore the menu bar for a host of features and functions.

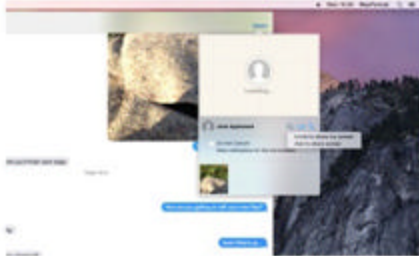


#### Sharing menu

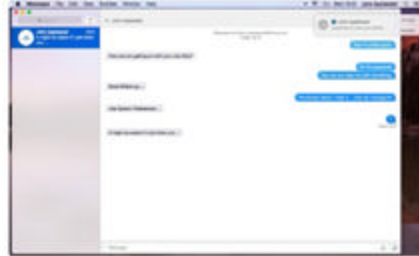
The Mac that is being watched gets an additional Screen Sharing menu bar icon, which enables access to Screen Sharing, Mute Audio, Pause and End Screen Sharing options.



## How to Use Screen Sharing in Messages



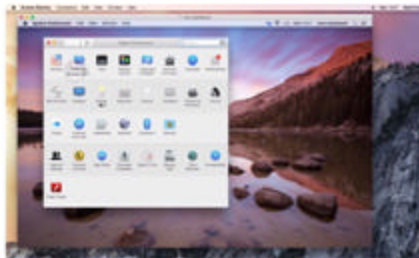
**1 Open the Details**  
Open Messages and converse with a friend; you have to share a message to get started. To view their OS X display, click on Details > Screen Sharing and Ask to share screen. ("Invite to share my screen" puts your display on their desktop instead).



**2 What they see**  
The other person gets a notification with "[Your name] would like to view your screen?" They need to click Accept for the session to begin; Decline ends the session. If the other person has Do Not Disturb on, they won't see the alert.



**3 Screen Sharing**  
A window appears on your desktop displaying their desktop. Screen Sharing automatically starts an audio conversation, so you can talk to the other person directly. Click the minimize button in Messages to focus on Screen Sharing.



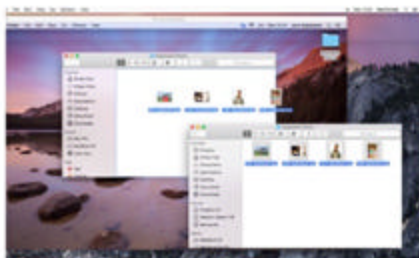
**4 Point things out**  
You can't take control of the other Mac immediately. The idea is you view their desktop and talk through the problem. Click and hold to display a loupe (magnifying circle). The other person will see it on their screen, so you can point things out.



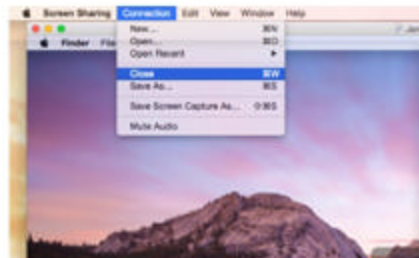
**5 Ask for control**  
If you want to take control of their screen, the other person needs to click the Screen Sharing icon in the Menu bar and choose "Allow [person] to control my screen." You can, of course, use the loupe to guide the other person to the right place.



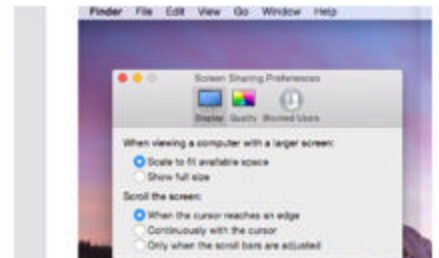
**6 Controlling the screen**  
You now have control of the other Mac. When you move your mouse pointer, the other pointer jumps to that spot. Clicks and drags you do on the Screen Sharing window also take place on their screen, as do key presses.



**7 Copying files**  
You can copy files directly from one Mac to another while screen sharing. Drag the files from the desktop, or Finder, into the Screen Sharing window. It's easiest to drag and drop to the other desktop, but you can place files in specific folders too.



**8 End the session**  
Choose Connection > Close to end the session, though the Screen Sharing app remains open. Choose Screen Sharing > Quit Screen Sharing to close the app. The other person can click Screen Sharing in the menu bar and choose End Screen Sharing.



### USING PREFERENCES

Choose Screen Sharing > Preferences for Display and Quality options. You can set the screen at full quality and fine-tune cursor controls.



# Create iBooks with Pages

Quickly turn text documents into professional-looking ebooks

## REQUIRES

> OS X 10.10, Pages 5.2

## LEVEL

> Medium

## IT WILL TAKE

> About an hour



**PAGES IS A** fantastic program used to create visually appealing documents, but you might not realize how versatile it is. It can also be used to create digital books for the iBooks app, and sold on the iBooks Store.

This conversion from Pages to iBooks is done via the ePub file format, which is used for digital books on Apple's iBooks app on both OS X and iOS. With Pages for OS X you can export a text document straight into ePub, and import it directly into iBooks for OS X.

Pages has featured some form of ePub export since 2010, but until recently it was cumbersome. Each new edition has improved the exporting process and with Pages 5.2 it's now as easy to create a digital book as it is to print a document. In this way, you convert something you've written to an ebook format, or grab a royalty-free book from the internet in a text format and turn it into a more rich, pleasant to read format.

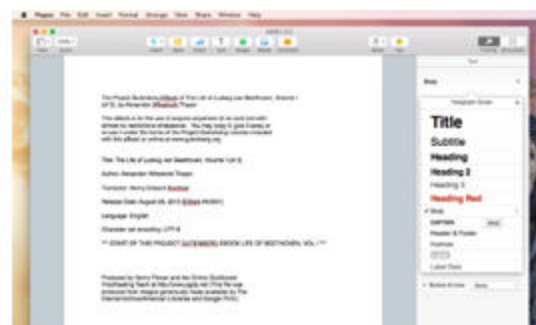
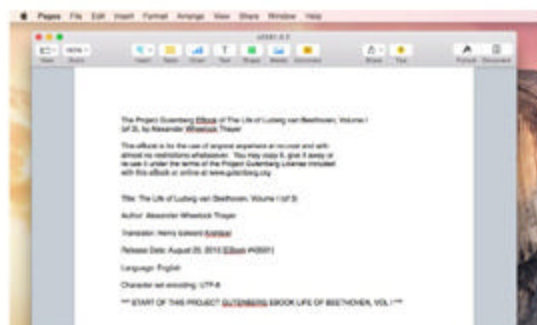


For those looking to self-publish, in Pages you can add Retina display-quality images, chapters, headings, custom artwork, even video clips. Pages turns it into an ePub you can share, or even sell on Apple's iBooks Store. Pages doesn't offer the extra interactions of iBooks Author, but is ideal for many books. **LUCY HATTERSLEY**

**YOU CAN ADD RETINA DISPLAY-QUALITY IMAGES, CUSTOM ARTWORK, AND EVEN VIDEO**

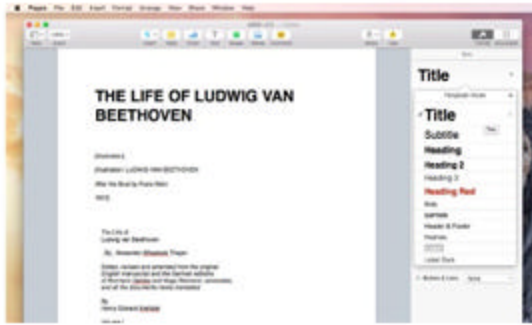


**ePub**  
Short for electronic publication, it's a free file format and open standard for files that display digital books. It's designed to work across all devices, though Amazon uses a different format for Kindle.



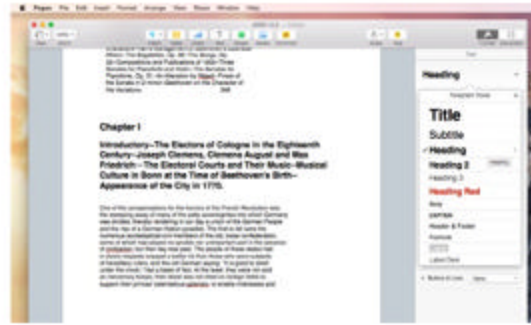
**1 The text document**  
Open your book's document in Pages; in this example, we're using *The Life of Ludwig van Beethoven* by Alexander Wheelock Thayer from Project Gutenberg ([gutenberg.org](http://gutenberg.org)), downloaded as a text file, to turn from plain text into a media-rich, digital book.

**2 Use the Format window**  
It's possible to turn a text document straight into a digital ePub file using the guide in Step 7. But digital books are far more friendly if you format the text first. Choose View > Inspector > Format. Click the Paragraph Styles area to view the text styles available.



### 3 Change the title

Find the book's title (or write it in full). Highlight the text and choose Title from the Paragraph Styles menu (Format bar). Styling up the title is important because Pages uses it to list the book in various areas, such as Contents. Only use this Title style once.



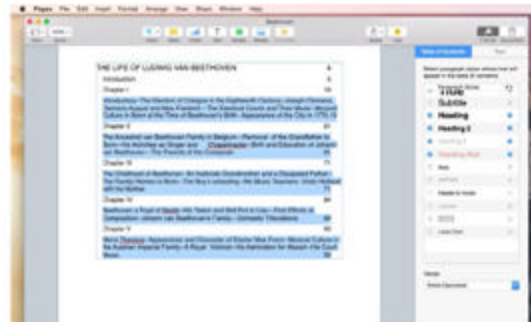
### 4 Add chapter headings

You use Styles to identify chapters. These are then used to create the contents. Find the first chapter title and change its style to Heading. For a sub-title, change its style to Heading 2. You can also use Heading 3 and so on, but it can make the contents look cluttered.



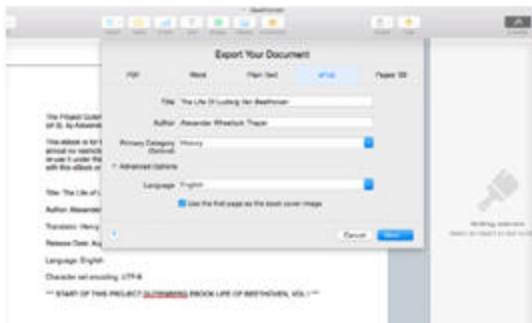
### 5 Cover image

Create a cover image by going to the start of the text and choose Insert > Page Break. Now drag an image file to the first page. Click the image, drag it so it snaps into position, then use the drag handle (bottom right) to resize it. You want it to fill up the entire page.



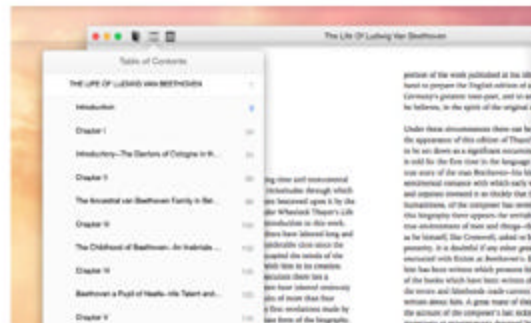
### 6 Create the chapter list

At the start of your text (after the image) choose Insert > Table Of Contents > Document. A Generating Table Of Contents box appears. You'll see a box displaying the title and headings marked with the Styles. This appears when you click Contents in iBooks.



### 7 Export the book

To create the book, Choose File > Export To > ePub. Fill out the Title and Author fields, and select a genre for the Primary category. Click Advanced Options; select Use the First Page as the Book Cover Image and click Next. Save when prompted, then click Export.



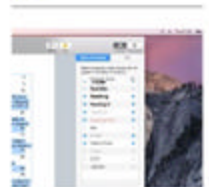
### 8 Open in iBooks

Open iBooks and choose File > Add to Library. Select the ePub file and click Add. It appears like any other book in the iBooks app - click to open it. Your first page will be the cover and the Contents icon displays the contents you added using Styles. Enjoy your book!

### TABLE OF CONTENTS

When you click on the Table Of Contents in the Pages document, a new section will appear in the format pane. In it, you can choose to add some additional styles, such as Caption, Header & Footer and Label, to the contents.

### ADDING VIDEO



For the full digital feel, you can even add video clips to ePub documents. Drag a video file from the Finder into the Pages document. The video clip is converted to a iOS-compatible format when you export the file from Pages for OS X.

# Manage files in Terminal

Navigate your system and make changes using text commands

## REQUIRES

> OS X 10.10

## LEVEL

> Hard

## IT WILL TAKE

> 30 minutes



**THANKS TO OS X'S** Unix foundations, it's possible to control your Mac using a command line with the built-in Terminal app. There are times when it's far quicker to use Terminal, and it also allows you to delve deep into advanced functions. You don't have to be a technical guru to manage your Mac using typed commands, and copy and paste makes it really easy: if you want to make complex configuration changes, you may need to look up at least some of the commands online, but you can then simply paste them into Terminal.

You'll find Terminal in Applications > Utilities. Once launched, you'll see a window showing a prompt including your username and a cursor. Our guide opposite introduces basic commands, though there are many others. You'll find an exhaustive list of them at [ss64.com/osx](http://ss64.com/osx).

There are several ways to find information about different commands. The **man** command

stands for "manual" and gives you an overview of the command, plus how to use it. To try it on the **ls** (list information) command, type this:

```
man ls
```

You should see a page giving brief details of how to use **ls** and its switches. You can do this for pretty much any command. Just type **man** followed by the name of the command to see its info. Manual pages do vary; some offer more detailed pages than others. Use the arrow keys to move through the information; press **q** to quit.

If you're after more information, try **info**.

To look up **ls**, use:

```
info ls
```

Info pages are usually organized into sections. If you need help navigating info pages, press **/** at any time. This gives a full list of keys and commands for using **info**. With a little practice and some patience you'll find that Terminal can be an really useful tool. **JOE CASSELS**

## Visual guide The manual window

### A Manual

To find more out about a command such as **ls**, enter **man ls** at the prompt.

### B Name

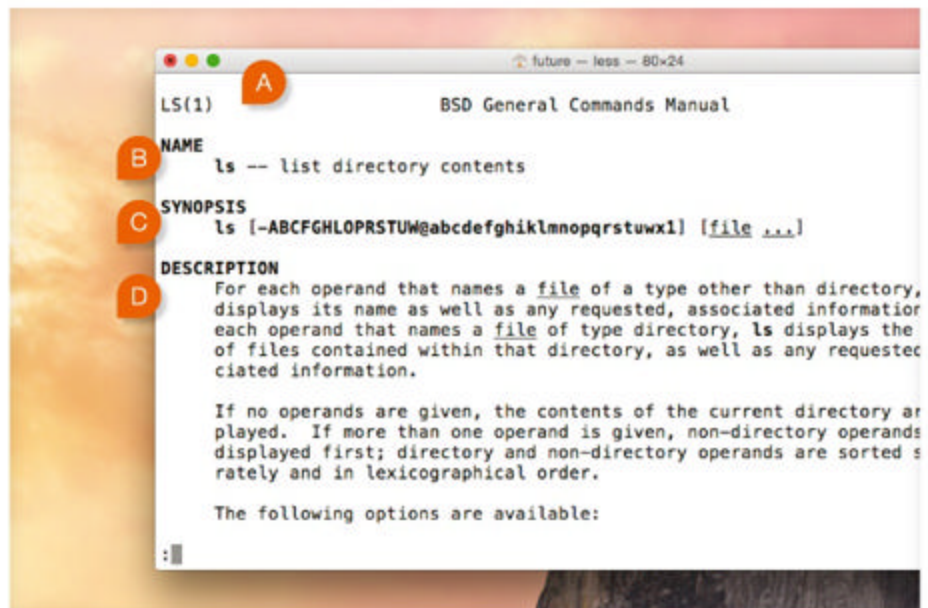
The command's full and short name. Here, we're showing "ls -- list directory contents".

### C Synopsis

This demonstrates the syntax: in this case **ls** followed by switches and any folder names.

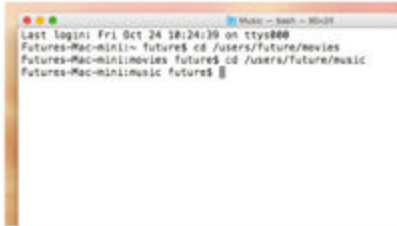
### D Description

A full description of the command. Scroll down for more info, including what switches it uses.

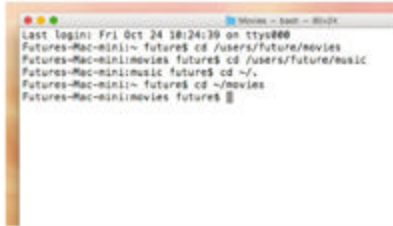




## How to Manage folders from within Terminal



**1 Change directory**  
Commands apply to the directory you're in. To move between directories, use the `cd` command. To move into Movies, in Terminal enter `cd /Users/username/Movies`. Replace "username" with your username. To move to Music, use `cd /Users/username/Music`.



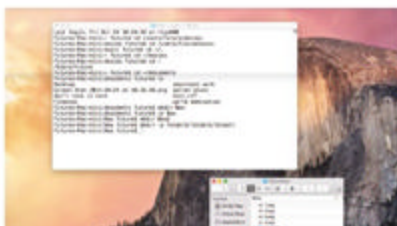
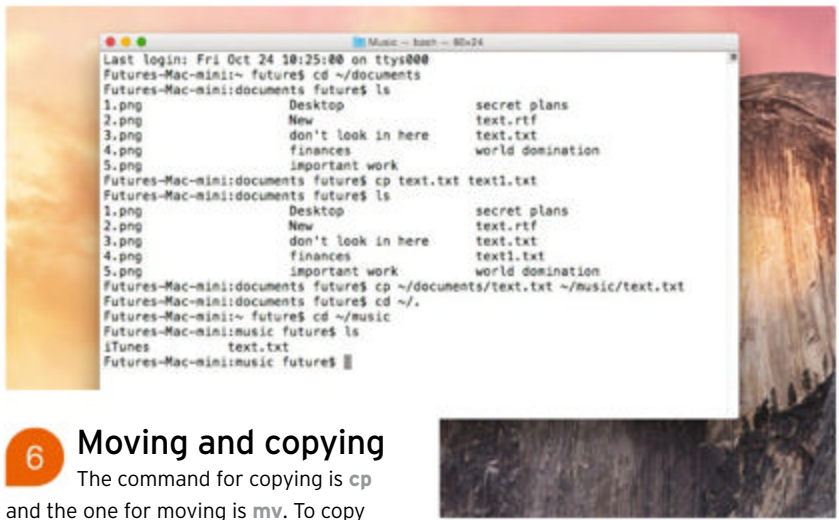
**2 Shortcuts**  
All the typing involved in inputting commands can be taxing, so you can use shortcuts with `cd`. For example `~` can be substituted for the path to your user directory. So, to enter your user directory, just type `cd ~`. For a quick way into Movies, try `cd ~/Movies`.



**3 Directory contents**  
When you change directory, you'll see the new directory displayed in the terminal at the prompt. To go back to the previous one, you can use the shortcut `cd -`. To list the contents of the current directory, use the `ls` command. This can help you to navigate around.



**4 Make a directory**  
If you need to make a new directory, use `mkdir`. To make one called "New" type: `mkdir New`. To make a directory within an existing directory, move to it and then create a new one. So to make "New2" inside "New," enter `cd New`, press `↵`, then `mkdir New2`.



**5 Directory structure**  
To create a directory structure made up of several nested folders (with one inside the other), you can use a single command by using `mkdir` and the `-p` switch. To make folder 1 inside folder 2, which is in turn inside folder 3, try `Mkdir -p folder3/folder2/folder1`.

**6 Moving and copying**  
The command for copying is `cp` and the one for moving is `mv`. To copy a file "text.txt" in the same directory: `cp text.txt text1.txt`. The copy file needs to be given a new name to prevent the original being overwritten. This isn't necessary if you're changing directory. Assuming "text.txt" is in your user directory and you want to copy it to the Documents directory within it, you could use `cp text.txt ~/Documents/text.txt`, or to move it, `mv text.txt ~/Documents/text.txt`. To copy or move something from a different directory (not the one you're working in), specify it with the source file. So to copy "text.txt" from the Documents folder to the Music folder, use `cp ~/Documents/text.txt ~/Music/text.txt`. To move it, substitute `mv` for `cp`.

### CHECK THE FOLDER

It's not always easy to see what folder you're in. To find out where you are, use the command `pwd` ("present working directory"). Then use the `ls` or `ls` command to find out what's in that directory.

# Extensions in Safari

Do more on your iPhone with iOS extensions

## REQUIRES

> iPhone, iOS 8, an app that provides a Share or Action extension

## LEVEL

> Easy

## IT WILL TAKE

> 10 minutes



**A LONG-STANDING** complaint about iOS is the tight degree of control Apple exercises over what apps are able to do. Those restrictions have been relaxed in iOS 8 to allow apps to extend the system's capabilities in defined ways. This means you aren't reliant on Apple adding support for a particular social network to be able to share something directly to it, and kludgy workarounds such as special bookmarklets that send a web page to an online service are no longer necessary.

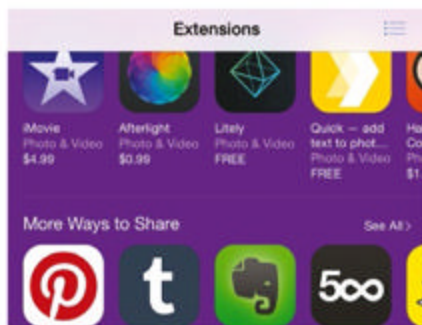
Extensions enable photo-editing apps to make filters and tools available within the Camera and

Photos apps. Information from apps can be displayed in widgets in Notification Center's Today panel, and acted upon from there. New keyboards enable entirely new input methods to be used, which can make life easier when typing into forms, for example. But it's the aforementioned ability to share a page to new places and perform new actions upon it, such as translating it between languages, that is particularly relevant in Safari.

Let's take a look now at where to find apps that add extensions, and find out how to activate and manage them. **ALAN STONEBRIDGE**

## EXTENSIONS MEAN YOU AREN'T RELIANT ON APPLE ADDING SUPPORT FOR SOCIAL NETWORKS

### How to Find extensions



#### 1 Finding extensions

There's no Extensions category in the App Store because apps of all kinds include them. Apple showcases good examples at [tinyurl.com/iosextensions](http://tinyurl.com/iosextensions). If you have a recent version of something there, you also have its extension, but you may not like an extension forcing its way onto the sheet that appears when you tap a Share button, so turning it on is up to you.

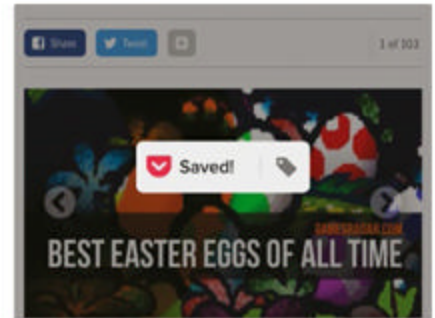
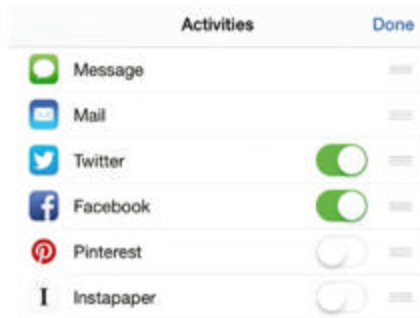
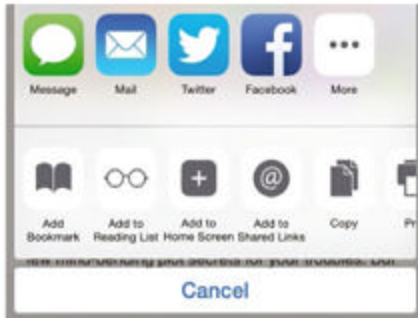
#### 2 Extensions for sharing

Apple's curated selection is organized by the types of extension. Scroll each row horizontally to see highlights, and tap See All, towards the right of any row, for more. The bottom two groups contain Share and Action extensions - look here to add support for social networks and online services not accommodated by iOS itself.

#### 3 Install an extension

Pocket is a bookmarking service similar to Safari's built-in Reading List but with some organizational features that Apple's offering lacks. Download it now. That's all that's required to get an app's extension on your iPhone. Using this one requires an additional step, besides turning it on: open its app and follow the prompts to sign up for the free online service.

## How to Manage and use extensions

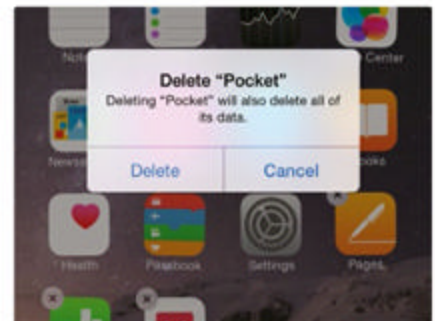
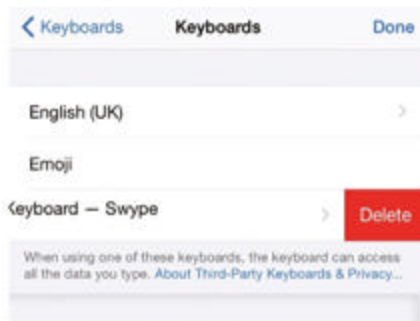
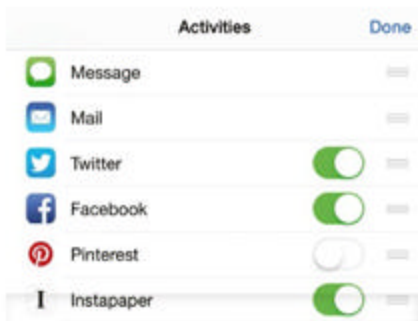


**1 See what's available** After signing in through the Pocket app, visit a page in Safari and tap the Share button in the bottom toolbar. In the Action sheet, Share extensions appear in the middle row. They might send the page to an app or an online service, or post a link to it on a social network. Tap the More button at the far right of the row for a list of all available Share extensions on your phone.

**2 Turn on and arrange** Switch Pocket on to make its extension appear in the Action sheet. Tap and hold on the right-most icon in each line (the one with three lines), then drag up or down to change the order of enabled extensions in the Action sheet, saving you having to swipe to reach favorites. (As of iOS 8.0.2, this setting seems to be forgotten when your device is restarted.) Tap Done.

**3 Try it out** Now tap Pocket's icon in the middle row of the Action sheet to save the current page to your account. On the right-hand side of the confirmation that appears in the middle of the screen, tap the tag to assign keywords – helpful if you save lots, and on different subjects. Open the Pocket app and it'll download the page you bookmarked so it can be viewed while offline.

## How to Disable and remove extensions



**1 Disable extensions** If you decide to try out, say, a rival to an online service, because it promises additional features, you can temporarily disable the extension for your existing service without removing it altogether. With the alternative app installed, go back to the Action sheet and tap More. Switch off the old extension, and enable the

**2 Disable keyboards** Keyboards can be hidden from the list that appears when the smiley face/globe key is held down. Go to Settings > General > Keyboards, tap Keyboards at the top of that page, swipe right to left on the one to disable, then tap Delete. (Don't worry, this won't delete that keyboard from your iPad or iPhone.) Tap Add New Keyboard...

**3 Remove extensions** Extensions are properly removed from your iPad only when you remove the app they came with. Tap and hold on the app's Home screen icon, then tap the cross that appears at its top left corner. If you later reinstall the app, iOS remembers whether its extensions – including keyboards – were turned on.



# Create iOS Pages templates

Use Pages on your Mac to make templates for iOS

## REQUIRES

> Pages for Mac

## LEVEL

> Medium

## IT WILL TAKE

> 20 minutes



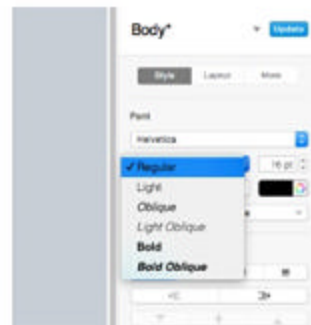
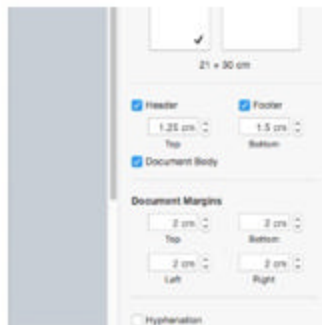
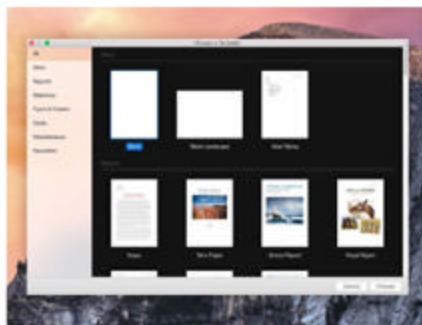
**ONE OF THE** joys of Pages is its support for templates. It ships with pre-built document types, covering newsletters, mailshots and everything in between, and each is a start point for your own work. Templates are subtly different to regular documents, as each is built using hot zones called “placeholders.” Tapping one lets you swap out its contents, with the new content taking on the formatting used to style up the placeholder.

If none of the templates supplied with the app suit your needs, you can create your own – on a Mac – to save time in the future and define your

own regular style. Pages isn’t a Mac-only app, though – it also runs on the iPad, iPhone and at [icloud.com](http://icloud.com) in a PC or Mac’s web browser, but none are as fully featured as the OS X original. While those versions can use templates as starting points, you can’t use them to build your own. Fortunately there is a workaround if you’re running Pages on iOS and the Mac: you can build your templates in OS X, then transfer them to your mobile device over iCloud. They still won’t work on [icloud.com](http://icloud.com), but you can save time and conform to house style when working on the move. **NIK RAWLINSON**

**IF NONE OF THE TEMPLATES SUIT YOUR NEEDS, CREATE YOUR OWN AND DEFINE A HOUSE STYLE**

## How to Set up your defaults



### 1 Start from nothing

Create a new document using Pages for OS X. You can start work with any template, but we recommend the portrait or landscape blank options as the others will likely include features you won’t want to include. Use the shortcut **⌘+R** to call up the ruler, or select **View > Show Ruler** in the menu bar. Making the ruler visible will keep element positions accurate.

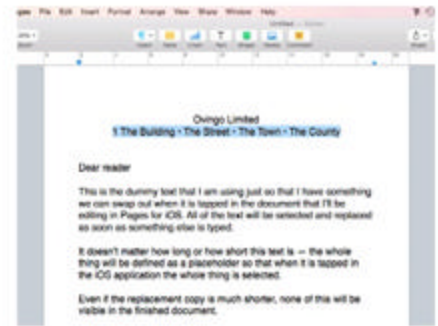
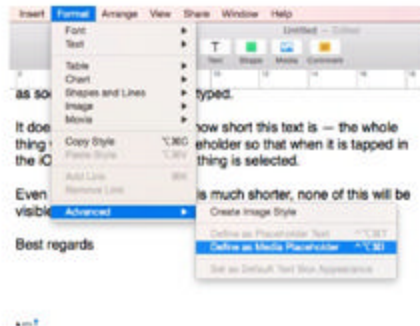
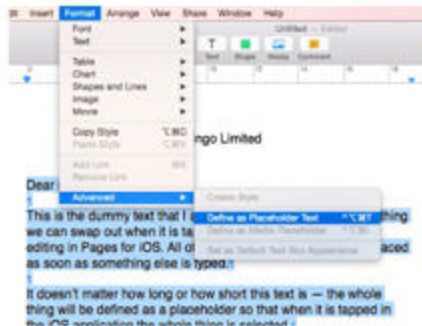
### 2 Making margins

Click the Document button on Pages’ toolbar to display settings. Work your way through the options, checking the page type, setting the header and footer space, and fixing the document margins. If you don’t need headers and footers, clear their check boxes. Decide if you want hyphenation, which helps create less ragged edges in left-aligned text.

### 3 Set your typeface

Type dummy text on the page and click the toolbar’s Format button. Update the text’s styling as appropriate, then use the Update button in the text box to save it to the template. Don’t use esoteric typefaces here, as although Pages for iPad sports a wide range of bundled fonts the selection isn’t as broad as on the Mac. Repeat this process for each style you want.

## How to Add content



### 1 Add placeholder text

Type dummy text onto the page, roughly the same length as text you'll want to appear in a document created with your new template. Highlight the text, pick Format > Advanced > Define as Placeholder Text. When tapped on iOS or clicked on the Mac in any document based on your new template, this text will be selected and replaced with whatever you type next.

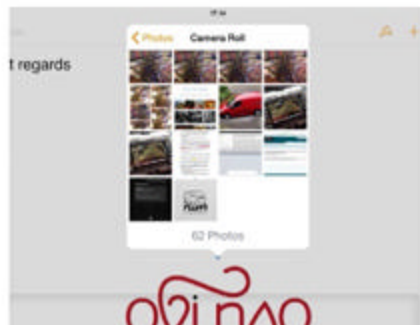
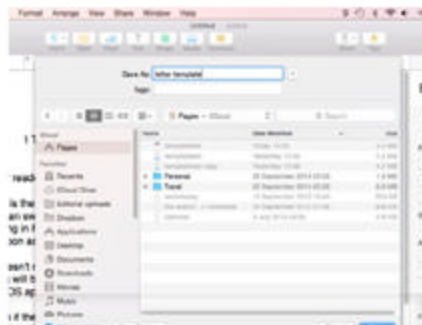
### 2 Placeholder media

Use  $\text{⌘} + \text{⌘} + \text{V}$  to call up the file chooser and navigate to an image you'd like to include in the template. Again, this needn't be the one that appears in the finished document - it's just an example for the template that will be swapped out later. Click Insert to add it to the page, resize and position it, and pick Format > Advanced > Define as Media Placeholder.

### 3 Add other elements

Add any other text, images, charts and shapes you want in documents created using the template, but which won't be swapped out with a single click. These will be editable in the finished document, but should be relevant content that wouldn't be out of place if left in the derivative file when printed, saved or shared. Define standard headers and footers.

## How to Access your template on iOS



### 1 Transfer template

Select File > Save as Template, then Save to save it to disk (not Pages for OS X's Template Chooser). In the browser, choose the Pages folder in your iCloud library, name the template and Save it. Launch Pages on your iPad. The template appears in the documents manager with a ruler to show it isn't a regular file. Tap it and Pages transfers it to the Template Chooser.

### 2 Use your template

Still on the iPad, tap the + button to create a new document and choose your new template from My Templates. Tap on the placeholder text that needs replacing and the block will be selected. Type your replacement content, then tap the + on the corner of a media placeholders to call up the iOS media browser and select the picture you want.

### 3 Rename document

Remember - you're not restricted to the placeholder items: you can add as many new elements as you like and delete placeholders if you don't need them. Everything on the template remains editable. When you've finished with the document, close it and Pages creates a new version, which you should rename by tapping its title in the document manager.

# Mark up documents in Preview

Use the Shape and Loupe tools to make notes on PDFs

## REQUIRES

> Preview, an image to work with

## LEVEL

> Easy

## IT WILL TAKE

> 20 minutes



**PREVIEW ISN'T JUST** for opening documents. It also packs powerful tools for editing and marking up pages and with Preview's Markup toolset you can add all kinds of items to your document.

Two useful things to know about in Preview are its Shapes menu, which can be used to add shapes, and a photographer's loupe (a small circular device used to magnify a document – look carefully at the Preview icon and you'll see a loupe in the bottom-right).

Shapes can be used to highlight a document, draw attention to certain parts, or strike out parts that should be deleted. The Loupe tool, on the other hand, creates a magnification effect on the document that enables you to zoom in on certain parts. The position and magnification level can be adjusted while you look at the document.

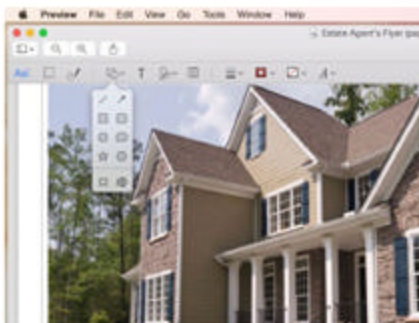
The great thing about shapes and loupes is that they are saved as objects that can be edited and repositioned (even by the person you send the file to). You can add a loupe to the PDF document, share it with somebody and they can reposition it and even delete it. The same goes with all of the shapes.

All of this sits on top of the already powerful annotation tools found in Preview, such as adding text and highlight text in the document. These tools can be revealed using the Show Markup Tools icon in Preview's tool bar. The Markup tools in Preview can also be used in Mail when you attach images or PDF documents, so it's a good idea to get familiar with them.

So, let's take a little look at adding shapes and loupes to Preview documents...

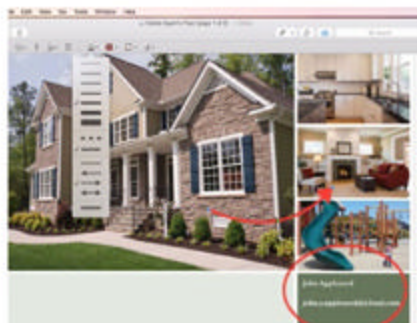
**LUCY HATTERSLEY**

## How to Add shapes and a loupe to a PDF document



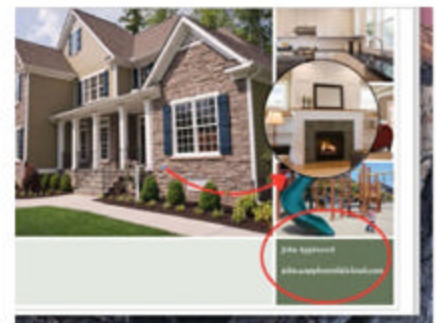
### 1 Adding a Shape

We start with a PDF document (created from a Pages template) with some images and text. We are going to add an arrow and draw a circle around the contact details at the bottom. Choose View > Show Markup Toolbar (or click the Show Markup Toolbar icon). Click Shapes (a square and circle icon) to reveal options. Click any of the shapes to add it to the document.



### 2 Arrange shapes

Hover the pointer over a shape and it turns into a hand icon. Click and drag to move the shape to a new position. Blue drag handles appear – click and drag these to resize the shape. Some shapes have an additional green drag handle – on a line or arrow you click the green handle to bend the line. Click the Shape Style and Border Color icons for style options for the shape.



### 3 Loop the Loupe

Choose Tools > Annotate > Loupe to add a loupe. This can be repositioned and resized, like a Shape, but it zooms in on the document beneath it. Click and drag the blue drag handle in and out to increase the size of the circle. Dragging the green drag handle around the loupe increases (or decreases) magnification. Choose File > Save to save the file with all its new shapes.



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RANDOM APPLE MEMORY

# Twentieth Anniversary Macintosh

What started as an everyMac turned into an elitist white elephant, says Adam Banks



The TAM wouldn't look out of place on a '90s car dashboard.

**RELEASED ON MARCH 20 1997**, the Twentieth Anniversary Macintosh missed Apple's 20th anniversary by a year. At \$7,499 (\$10,966 today, inflation adjusted), its price was also off the mark: the Power Macintosh 6500 offered similar features for half as much. Even heavy discounts couldn't shift the tiny run of 12,000 units.

Yet the TAM, with its futuristic LCD and CD-ROM in a vertical green-gray slab, was undeniably special, as up-and-coming designer "Jon Ive" [sic] explained in his first promotional video, complete with shock of dark hair. "Imagine," he said, "an object that is a television - that's a radio - that's a computer - whatever computer means."

What did it mean? Ive's boss and mentor, Robert Brunner, had created "Project Pomona" (after the Californian city and the goddess of fruit trees) to consider just that. Sub-teams of Apple's Industrial Design Group vied to prototype a next-generation computer that would fit better in the home. Ive's entry eschewed a flat screen to reduce cost, but concealed its bulky CRT inside a cupboard door unit that looked like it could have been made by Alessi, with a kooky analog clock on the front.

This "Domesticated Mac" didn't win; Brunner's own design did, and Ive's task was turning it into a product codenamed "Spartacus." Thwarted by technical and

marketing impositions, the result, a chopped laptop beefed up with Bose speakers, was designated as a special edition - very much the opposite of the original brief. It was a critical success, but a commercial failure.

Frustrated, Brunner took an offer to join legendary design collective Pentagram. With Ive left in the design chair as Steve Jobs returned to Apple's helm, the next 20 years would be more fruitful.

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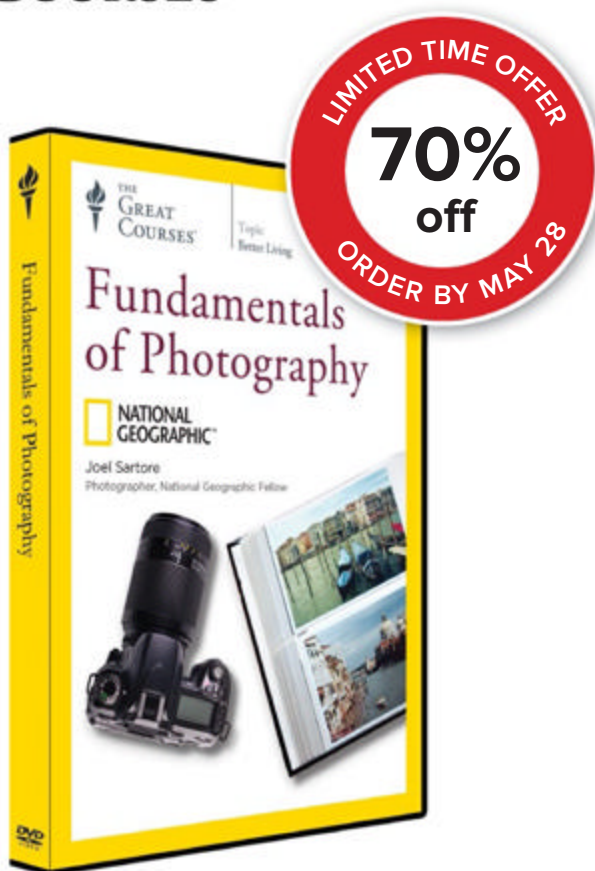


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